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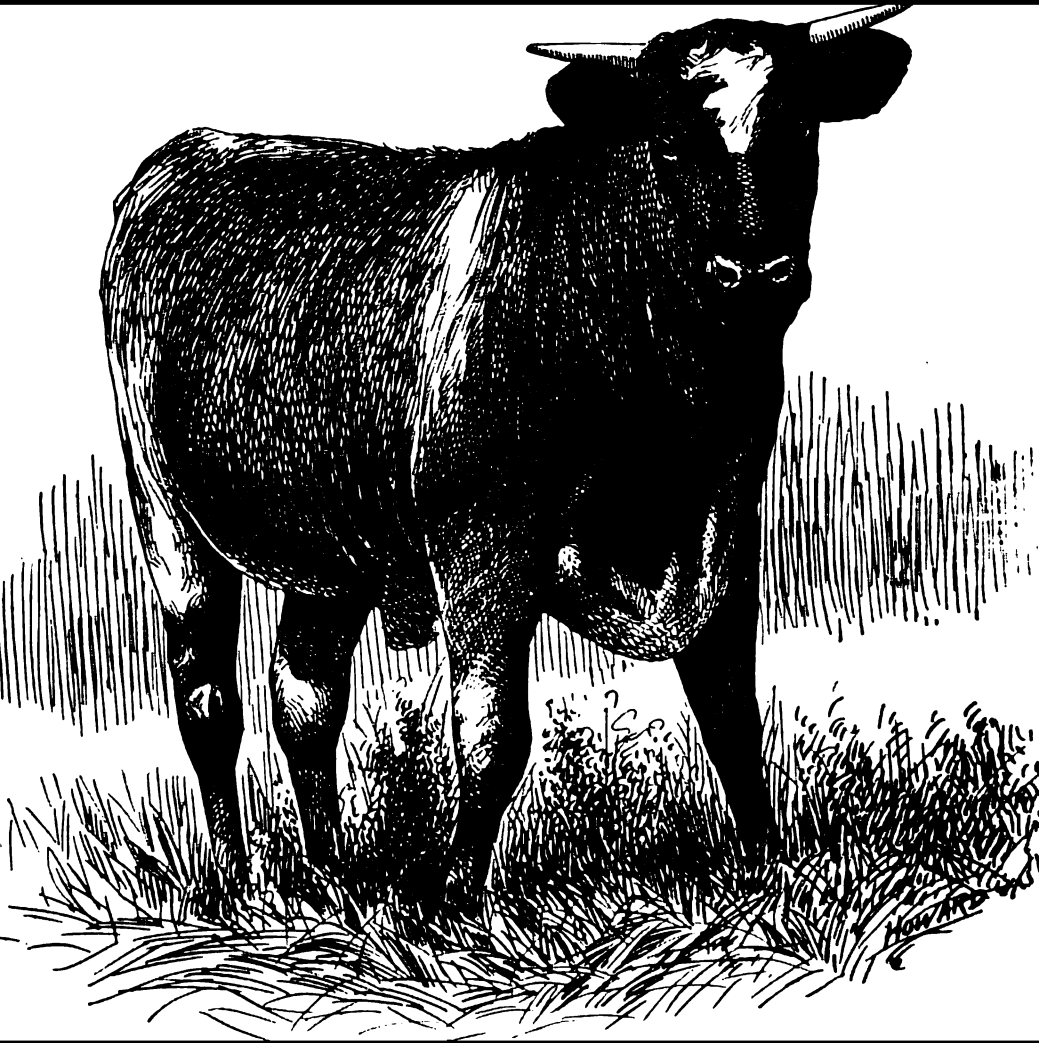
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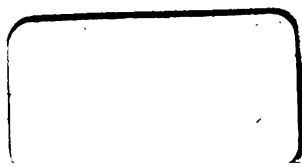
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*Annual report of the Bureau of
Animal Industry for the year ...*

United States. Bureau of Animal Industry



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1897

(B. A. I. 117.)

U. S. DEPARTMENT OF AGRICULTURE.

FOURTEENTH ANNUAL REPORT

OF THE

BUREAU OF ANIMAL INDUSTRY

FOR THE



FISCAL YEAR 1897.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1898.

128038

[PUBLIC—No. 15.]

AN ACT providing for the public printing and binding and the distribution of public documents.

SEC. 73. Extra copies of documents and reports shall be printed promptly when the same shall be ready for publication, and shall be bound in paper or cloth, as directed by the Joint Committee on Printing, and shall be the number following, in addition to the usual number.

* * * * *

Of the Report of the Bureau of Animal Industry, thirty thousand copies, of which seven thousand shall be for the Senate, fourteen thousand for the House, and nine thousand for distribution by the Agricultural Department.

Approved, January 12, 1895.

LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY,
Washington, D. C., June 1, 1898.

SIR: I have the honor to transmit herewith the fourteenth annual report of the Bureau of Animal Industry, prepared in accordance with the organic act of the Bureau.

For various reasons, the reports for the last ten years have been printed and bound biennially; but such arrangements have recently been made in the line of editorial assistance as will enable me hereafter to submit the report soon after the close of each fiscal year. This report differs somewhat in character from its predecessors in the respect that it contains but few scientific papers. This is due principally to the late date upon which the editorial work was taken up, but the volume does not suffer in size, nor is it uninteresting for this omission.

The table of contents shows a list of interesting popular articles, including some investigations relative to sheep scab, anthrax, rabies, etc., conducted by the Bureau. Under the head of "Some agricultural experiment station work" are abstracts of several bulletins issued by experiment stations. It is believed that this feature of these reports will be of practical benefit, and it is designed to abstract for the next report quite fully the station bulletins relative to contagious animal diseases, the feeding of farm animals, and the dairy work. For convenience of reference there is brought together in this volume a large amount of tabular matter, including the movement of farm animals for a series of years; the number and value of farm animals from 1870 to 1896, inclusive, compiled from the reports of the Statistician of this Department; and the imports and exports of animals and animal products for the years 1892 to 1896, inclusive, compiled from the reports issued by the Bureau of Statistics of the Treasury Department. A strenuous effort has been made to secure all of the State and Territorial laws relative to contagious and infectious animal diseases which have not been published in the previous reports of the Bureau, and it is believed that the record is now about

perfect. The Dairy Division has also compiled for publication herein the State and Territorial laws relating to the various phases of the dairy industry. Considerable space is also given to a compilation of the orders which have been issued by the Bureau since its organization.

Provision for printing this report is made by Congress, and I recommend that it be forwarded to the Public Printer for publication.

Very respectfully,

D. E. SALMON,

Chief of Bureau of Animal Industry.

Hon. JAMES WILSON,

Secretary.

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FOURTEENTH ANNUAL REPORT OF THE BUREAU OF ANIMAL INDUSTRY.

REPORT OF THE CHIEF OF THE BUREAU.

MEAT INSPECTION.

It has still been impossible to inspect all the animals slaughtered in the United States for human food, the meat of which is to be shipped in the channels of interstate or foreign commerce. The force engaged in this inspection has been enlarged from time to time in recent years and the number of animals inspected has increased each year. During the past year all of the beef exported to Europe and the greater part of the pork and other meat products exported have been inspected in accordance with the law. There has, however, been a large amount of meat slaughtered for the interstate trade which it has been impossible to inspect with the appropriation at the disposal of this Bureau. This is a very important matter, and every effort should be made to secure the inspection of all the animals which the law contemplated should be inspected, as otherwise there is a tendency to take doubtful or suspicious animals for slaughter to abattoirs where inspection has not yet been established.

The progress during the year has been satisfactory, and if the appropriation is increased so as to allow a continued development of the inspection service at the same rate, it will not be many years before the intent of the law is entirely accomplished. The meat-inspection force is now a very competent and efficient one. The inspectors and assistant inspectors are veterinarians, many of whom have passed a rigid examination under the Civil Service Commission, and the greater part of the nonprofessional members of the force have had such long experience that their services are extremely valuable. The persons obtained by certification from the eligible list of the Civil Service Commission have, as a rule, been more competent and efficient than those obtained before the force was brought within the classified service, and it has been possible to maintain much better discipline than was the case when a considerable proportion of the force believed that they had influence which made them more or less independent of the head of the Department and the Chief of the Bureau.

The work of meat inspection was in operation at 128 abattoirs and packing houses, located in 33 cities.

Following is a table showing the number of ante-mortem inspections made in the stock yards and at abattoirs, with the number of animals condemned at the abattoirs and the number rejected in the stock yards. The animals rejected in the stock yards are tagged and held subject to future disposition, either slaughter, shipment to the country for stocking purposes, or release when in proper condition for food.

Ante-mortem inspections.

Animals.	For official abattoirs in cities where the inspection was made.	For abattoirs in other cities and miscellaneous buyers.	Total inspections.	Condemned at abattoirs.	Rejected in stock yards.
Cattle.....	4,239,058	3,980,967	8,250,025	185	24,951
Sheep.....	5,179,043	2,864,712	8,044,355	757	10,508
Calves.....	259,980	189,053	448,983	56	2,597
Hogs.....	16,813,181	8,753,568	25,566,744	12,858	40,287
Total.....	26,541,812	15,788,295	42,310,107	13,866	78,338

Below is a statement showing the number of post-mortem inspections made at the abattoirs where inspection was maintained, and the number made on animals rejected in the stock yards and slaughtered at various places, with the number of carcasses and parts condemned as unfit for human consumption. The rigid character of the ante-mortem inspection in the stock yards is evidenced by the fact that on the post-mortem examination of rejected animals the greater part is passed as fit for food.

Post-mortem inspections.

Animals.	Number of inspections.			Carcasses condemned.			Parts of carcasses condemned at abattoirs.
	At abattoirs.	On animals rejected in stock yards.	Total.	At abattoirs.	Stock-yard inspections.	Total.	
Cattle.....	4,242,216	11,634	4,253,850	6,618	3,725	10,343	10,290
Sheep.....	5,209,161	4,738	5,213,894	3,086	1,652	4,738	1,213
Calves.....	273,124	787	273,911	238	311	549	42
Hogs.....	16,808,771	30,263	16,839,034	141,562	12,929	54,491	237,750
Total.....	26,533,272	47,417	26,580,689	51,504	18,617	70,121	49,295

¹ Includes 3,243 condemned on microscopic examination.

² Includes 10,082 condemned on microscopic examination.

In addition to the above, there were killed by city inspectors 641 cattle, 1,527 sheep, 40 calves, and 2,081 hogs that had been rejected in the stock yards by officers of the Bureau of Animal Industry.

The meat-inspection tag or other mark of identification was affixed to 14,510,662 quarters and 863,248 pieces of beef, 5,161,927 carcasses of sheep, 231,879 carcasses of calves, 524,556 carcasses of hogs, and 314,947 sacks and pieces of pork.

The meat-inspection stamp was placed on 4,692,069 packages of beef products, 3,711 of mutton, and 7,463,259 of hog products, including 120,328 containing microscopically examined pork.

The number of certificates of inspection for exported products issued was 21,825 for meat products which had undergone the ordinary inspection and 7,560 for pork microscopically examined, in addition to the regular inspection. These certificates covered the shipment of 1,128,717 quarters and 20,259 pieces of fresh beef, 1,249 carcasses of sheep, 3,721 carcasses of hogs, 519,017 packages of beef, 3,711 packages of mutton, and 411,948 packages of pork, of which 119,549 contained pork which had been microscopically examined.

There were sealed 12,664 cars containing inspected meat for shipment to packing houses and other places.

The cost of this work was \$385,796.36, which, while including all the expenses incident to the work, makes an average of 0.91 cent for each ante-mortem inspection.

For the purpose of comparison the following table is given:

Table showing the number of animals inspected before slaughter for abattoirs having inspection.

Fiscal year.	Cattle.	Calves.	Sheep.	Hogs.	Total.
1891.....	87,801				87,801
1892.....	3,107,009	50,089	583,381		3,900,459
1893.....	3,022,174	92,947	870,512		4,885,633
1894.....	3,802,111	96,324	1,020,784	7,964,850	12,941,066
1895.....	3,752,111	109,941	1,344,031	13,576,917	18,783,000
1896.....	4,050,011	212,575	4,710,190	14,301,993	23,275,739
1897.....	4,280,058	250,930	5,179,643	16,812,181	26,541,812

MICROSCOPIC INSPECTION OF PORK.

In the microscopic examination for trichinæ 1,881,309 specimens were examined—550,291 from carcasses and 1,331,018 from pieces. The number of samples found infected was 13,325, of which 3,243 were from carcasses and 10,082 from pieces of pork.

The following table shows the exports of microscopically inspected pork, 1892–1897:

Extent of microscopic inspection of pork for export.

Fiscal year.	To countries requiring inspection.	To countries not requiring inspection.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1892.....	22,025,008	16,127,170	38,152,874
1893.....	8,058,758	12,017,652	20,077,410
1894.....	18,845,119	18,582,818	35,427,937
1895.....	20,355,220	5,739,368	45,994,598
1896.....	21,497,321	1,403,559	22,900,880
1897.....	42,570,572	1,001,783	43,572,355

The number of pounds exported was 43,572,355, of which only 1,001,783 pounds went to countries not requiring a certificate of microscopic inspection.

The cost of this inspection was \$111,669.30, an average per specimen examined of 5.94 cents, or an average of 0.256 cent for each pound of microscopically examined meat exported.

INSPECTION OF VESSELS AND EXPORT ANIMALS.

The number of inspections of domestic cattle for export was 845,116; number tagged, 410,379; number rejected, 1,565; number of inspections of domestic sheep, 348,108; number rejected, 189. The number of Canadian cattle inspected was 13,136; number rejected, 12; Canadian sheep inspected, 23,289; rejected, 72.

The number of domestic animals exported under the supervision of inspectors consisted of 390,554 cattle (5,501 shipped from Chicago by way of Montreal), 184,596 sheep (2,231 from Chicago by way of Montreal), 22,623 horses, and 100 mules. Canadian animals were exported from United States ports as follows: 13,124 cattle, 23,217 sheep, and 6,185 horses.

The number of certificates issued for cattle was 1,563; the number of clearances of vessels was 954.

Following is a statement showing the number of cattle and sheep inspected at time of landing by the inspectors of the Bureau stationed in Great Britain, and the number and percentage of losses in transit:

Inspection of cattle and sheep in Great Britain and losses in transit.

From--	Cattle.			Sheep.		
	Number landed.	Number lost.	Per cent.	Number landed.	Number lost.	Per cent.
United States	367,277	2,124	0.57	100,936	2,184	1.29
Canada	10,409	190	1.88	22,247	402	2.17
Total	377,686	2,323	0.61	123,183	2,586	1.39

The percentage of loss in export animals during the year has been moderately low, although not so low as in some previous years. In 1894 the percentage of loss of cattle was 0.37; in 1895 it was 0.62, and in 1896 0.32. The loss of sheep in 1894 was 1.29; in 1895, 2.7; in 1896, 1.16. We can never expect a uniformly low rate on account of the great variation in conditions of the weather.

The cost of the inspection of export animals, the Texas fever work, and the inspection of animals imported from Mexico was \$102,555.16. If it may be assumed that half of this amount is properly chargeable to the export work, the cost of inspecting the 575,150 domestic cattle and sheep exported would be \$51,277.58, or 8.9 cents per head. The number of inspections made on these animals in this country was 1,193,224 and in Great Britain 534,213, making a total of 1,727,437, the average cost of each inspection being 2.97 cents.

Following is a statement showing the inspection of domestic cattle and sheep for export and the number exported for 1897 and previous years:

Extent of inspection of cattle and sheep for export.

Fiscal year.	Cattle.				Sheep.		
	Number of inspections.	Number rejected.	Number tagged.	Number exported.	Number of inspections.	Number rejected.	Number exported.
1897.....	845, 116	1, 565	410, 379	390, 554	348, 108	189	184, 593
1896.....	815, 882	1, 309	377, 639	365, 345	733, 657	893	422, 603
1895.....	657, 756	1, 080	324, 339	324, 299	704, 044	179	350, 808
1894.....	725, 243	184	390, 580	363, 535	135, 780		85, 800
1893.....	611, 542	292	280, 570	280, 240			

INSPECTION OF IMPORTED ANIMALS.

The number of animals imported from Mexico and inspected at the ports of entry along the boundary line was as follows: 292,479 cattle, 43,393 sheep, 12 hogs, and 171 goats.

The number imported from Canada and inspected at northern boundary ports, and not subject to quarantine, consisted of 42,953 cattle, 331,137 sheep, 212 swine, 2,635 horses, 9 mules, and 1 goat.

Below is a statement of the imported animals which were quarantined for the prescribed period at the different quarantine stations:

Number of animals quarantined, by stations.

Station.	Number of cattle.	Number of sheep.	Number of hogs.
Littleton, Mass.....	1	102	13
Garfield, N. J.....	36	115	42
St. Denis, Md.....	0	2	0
Vanceboro, Me.....	1	0	0
Houlton, Me.....	2	10	0
Newport, Vt.....	1	0	0
Richford, Vt.....	3	0	0
Rouse Point, N. Y.....	4	0	0
Ogdensburg, N. Y.....	144	0	0
Buffalo, N. Y.....	165	0	0
Port Huron, Mich.....	5	0	0
Total.....	302	229	55

There were also 14 goats and 18 camels at the Garfield station, making a total of 678 animals quarantined.

SOUTHERN CATTLE INSPECTION.

During the quarantine season of 1896 there were received and yarded in the quarantine divisions of the various stock yards 42,869 cars, containing 1,154,235 cattle; 43,529 cars were cleaned and disinfected.

The supervision and control of the movement of cattle from the district infected with Southern, or splenic, fever involves the placarding of cars and stamping of waybills, the proper yarding of Southern cattle in order that they may not come in contact with susceptible animals, and, when reloaded at one station, the notification of the inspector at the point of destination or at intermediate stations.

In the noninfected area in Texas 220,543 cattle were inspected and permitted to be moved to other States by trail and railroad for grazing.

An experiment is now in progress in Page County, Iowa, to determine to what extent and at what cost hog cholera can be prevented or controlled by sanitary regulations. The legislature at its last session passed a special act giving authority to destroy animals and to enforce necessary quarantine regulations. The funds available for this experiment are not sufficient, but it is hoped that the work may be sufficiently thorough in a part of the county to indicate what may be accomplished by the enforcement of such regulations. Experiments are also being made to learn what can be accomplished by killing only the plainly diseased animals and treating those exposed with hog cholera antitoxin. It is yet too early to form an idea of the results that will be obtained through these experiments, further than to state that the antitoxin evidently has a beneficial effect. The laboratory and experiment station are now engaged upon investigations looking to the production of an antitoxin of greater protective power and at less expense than has been possible heretofore.

WORK OF THE PATHOLOGICAL DIVISION.

DESTRUCTION OF CATTLE TICKS.

Probably the most important work which this division has had in charge has been the experimental study of the effect of different substances in destroying the ticks which spread the infection of Texas fever. For a long time it appeared as though no mixture could be obtained which would kill these parasites without severely injuring the cattle which were treated. Recently it has been found that a petroleum product known as paraffin oil will destroy the ticks without greatly irritating the skin of the animals to which it is applied. It is thought that by dipping the cattle twice in this oil, with an interval of a few days, all the ticks will be destroyed, and the animals, even from the infected district, may thereafter be shipped with safety to any part of the country. If this hope is fulfilled, the dipping of cattle from the infected district must soon become general, and will save millions of dollars to the Southern States. At present such cattle must be kept separate and in quarantine pens, and sold as quarantined animals, at less prices than they would bring in case they were free from restrictions. The general dipping of infected cattle would also prevent the infection of cars and stock yards and

enable this Bureau to prevent the dissemination of Texas fever, with less hardship to the owners of cattle and with greater safety to the stock interests.

BLACKLEG.

An effort is also being made to prevent the losses from the disease known as blackleg, or symptomatic anthrax, by distributing to the owners of herds where such losses occur a vaccine that will produce immunity. The ravages of this disease in some of our States have become very discouraging to the owners of cattle, particularly those who have endeavored to grade up their herds and breed the best beef-producing varieties. Many owners of large herds have reported annual losses ranging from 8 to 14 per cent. This disease appears to be quite easily prevented by vaccination. Heretofore, however, the methods used in this country have required two vaccinations, with an interval of ten days or more, and the trouble and expense of a double vaccination, added to the cost of the vaccine, has deterred many stock owners from adopting this method of prevention. The Pathological Division has experimented with a vaccine prepared by a special method and which produces sufficient immunity to resist the disease by one vaccination. This division has prepared a large quantity of this vaccine and has distributed it for experimental purposes. By securing this material free of charge and obtaining immunity with a single operation, the method has been so simplified and cheapened that cattle owners who have suffered from the disease in the past are very anxious to adopt it.

RABIES.

Many investigations of reported outbreaks of disease have been made and a considerable number of tests made of animals supposed to be affected with rabies. A great variety of opinions has been expressed concerning the existence of rabies and the extent to which it prevails in this country. There are few institutions which are prepared to make a scientific test of animals supposed to be affected with this disease, and consequently the work of the Pathological Division in this direction is of great importance. A considerable number of undoubted cases of the disease have been discovered in this way, and it has been found that some mysterious outbreaks of disease among cattle were really attributable to this cause.

WORK OF THE BIOCHEMIC DIVISION.

This division has manufactured and distributed to State authorities during the past year sufficient tuberculin to test 57,000 cattle for tuberculosis, and sufficient mallein to test 1,400 horses for glanders.

This division has also succeeded in manufacturing an ink which is of great assistance in branding carcasses and pieces of inspected meats. Such branding answers the purpose of identification in many cases,

as well as seals and tags, and where used results in a great saving of money, since it can be applied much more rapidly and costs for material very much less. About 70 gallons of this ink have been prepared and shipped to the various meat-inspection stations during the year.

This division has also experimented in the preparation of serums for the treatment of tuberculosis, hog cholera, and swine plague, but the results up to this time are not such as to enable the Bureau to introduce such methods in its practical work.

An experiment has been made by cooperation between the Biochemic and Pathological divisions of this Bureau and the Division of Chemistry of the Department for determining the alleged poisonous properties existing in cottonseed meal. American and Egyptian meals have been fed in very large quantities, but without producing any disease or any evidence of poisoning. The animals in the experiment thrived and gained rapidly upon the feed, even when the ration was increased to extraordinary quantities of the meal. Other investigations of a chemical nature have been in progress, which will be reported in detail elsewhere.

WORK OF THE ZOOLOGICAL LABORATORY.

During the fiscal year 1896-97 the Zoological Laboratory has continued its work in studying animal parasites. Considerable time has been consumed making specific determinations of specimens which are referred from the Inspection Division or from sanitary officials, physicians, or zoologists in various parts of the country. Aside from these determinations the laboratory has been occupied with statistical hygienic work and original technical investigations.

With a view to determining the value of the German microscopic examination of pork for trichinæ the various outbreaks of trichinosis in that country from 1881 to 1895 have been collated. As might be expected on theoretical grounds, several cases of this disease have occurred from German pork which the German officials have inspected and declared free from trichinæ. The number of such cases, however, is greater than one would expect from the German regulations, and shows conclusively that the German system of inspection is far below the degree of thoroughness usually ascribed to it. Over 40 per cent of all the cases of trichinosis thus far collected for Germany for the fifteen years referred to has been caused by pork which the German inspectors have examined and declared to be free from trichinæ, while about 14 per cent of all the cases in Germany during the same years was due to pork which in some way escaped the sanitary officials. In some cases the inspector would fail to examine the meat; in others it was examined and condemned, but afterwards stolen and placed on the market. It is a remarkable fact that with all these cases of trichinosis, which are laid at the door of the German inspection and the German pork, there was not a single case of the disease

in Germany during the fifteen years referred to which the German sanitary authorities have been able to show was due to American pork.

As another line of sanitary study the Zoological Laboratory has prepared for the use of the Bureau inspectors a bulletin on certain animal parasites found in meats, with special reference to their direct or indirect transmissibility to man. Most important among these is the *Echinococcus hydatid*, which appears to be more common in this country than formerly supposed. As this is the cause of a very fatal disease in man it behooves sanitary officials to take early and proper precautions to prevent its further spread.

Various laboratory and field experiments upon scab have been begun and are still in progress.

For about two months the entire attention of this laboratory was occupied with a study of the parasites of the fur seal, undertaken at the request of the United States Treasury Department. An extensive report on the subject has been submitted to the United States Seal Commission for publication.

Owing to the unsatisfactory state of knowledge concerning most of the American parasites it is necessary for this laboratory to undertake considerable study of a very specialized and technical nature. One bulletin, half of which was composed of technical details, on the parasites of poultry has been issued, and a technical bulletin on certain parasites of hares and rabbits and their relation to the parasites of cattle, sheep, and horses, prepared by this laboratory, has been published by the National Museum.

Finally, the laboratory has made an extensive study of all the various codes of zoological nomenclature in preparation for the meeting of the International Commission of Zoological Nomenclature, at which this Department was represented. This movement, inaugurated by the last International Zoological Congress, has resulted in final mutual concessions on the part of scientific men of different countries, and the few remaining points of disagreement in this subject have been done away with, and we now have a completely uniform set of technical names in all countries.

WORK OF THE DAIRY DIVISION.

The general survey of the condition of the dairy industry in different parts of the country, which was begun immediately after the organization of the division in July, 1895, has been continued through the medium of the regular force aided by a few special agents. This inquiry has been made by single States and groups of States, and has resulted in several reports, some of which have been printed and others are in hand awaiting revision and publication.

A special inquiry has been in progress in like manner as to the milk supply and service of representative cities and large towns in the

United States, and the field work, so to speak, has been completed at some points.

The collection of dairy data in general continues with a view to its proper arrangement and future use in the form of circulars of information, popular bulletins, and the like.

The calls for specific information by letter have greatly increased, as well as the routine work of the office and the volume of correspondence in general. This service, together with preparing several publications, has so occupied the office force as greatly to retard the important work of collating and indexing for permanent use and reference the mass of data which is constantly accumulating.

During the year there have been published eight bulletins and three circulars prepared in the division, besides contributions to the Yearbook of the Department and to the Annual Report of the Bureau of Animal Industry—in all comprising 287 printed pages.

Work is well advanced upon a compilation showing the movement of dairy products in the United States from producer to consumer, the condition of and important changes in the principal domestic markets, and the dairy export interests of the country, all to be offered for publication as a bulletin under the title of "Commerce of the Dairy," as a suitable supplement to "Statistics of the Dairy," already published.

The chief and assistant chief of the division have visited during the year centers of dairy interest in 23 States, and collected information for future use. Incidentally, the same officers have attended general meetings of 13 State and similar organizations of dairymen, and have been enabled thereby to meet hundreds of the representative men connected with this industry in various parts of the country, and to establish relations which will be of material future benefit to the general work.

Soon after the establishment of the division, attention was directed toward the condition of the foreign trade of the United States in dairy products. It was noticed that the cheese trade in general was depressed and demoralized, mainly as a consequence of the heavy decline in exports during recent years, the causes for which were discussed in the Yearbook for 1895. Also, that a surplus of good butter was beginning to show itself for the first time in this country, rendering an enlarged market and new outlets of importance. It became known that Canada had secured nearly all the trade for cheese in Great Britain which the United States had lost, and this had been done through the direct instrumentality of the Canadian government in encouraging, aiding, and instructing cheese factories, and improving means of transportation. Canada was found, in addition, to be entering upon a similar course of developing and patronizing the creamery system of butter making and establishing a foreign trade with this product.

It was therefore evident that active measures should be taken to reestablish and extend foreign markets for the surplus butter and cheese produced in the United States, and early in the year a definite recommendation was made from this office for preliminary work in this direction.

Arrangements were begun in March for making experimental exports to foreign markets of carefully selected butter from creameries in the large butter-producing sections of the United States. These shipments commenced in May, and were made every three weeks until near the close of the calendar year 1897. The trial exports thus made were from the port of New York to the London market via Southampton.

Without anticipating the results of the season's trials, or the report to be made thereon, it can be readily asserted that English merchants of reputation and influence have been better convinced than ever before of the high quality of butter obtainable in different parts of this country, and the practicability of placing it in British markets from ten to fourteen days after churning, and without appreciable deterioration. The terminal facilities and the accommodations for refrigerated storage during ocean transit are not yet what is desired in kind or capacity, but it is evident that if the commercial demands increase and remain sufficiently constant the transportation facilities will become adequate and satisfactory.

These trial exports serve the double purpose of obtaining useful information for our own people, as producers and sellers, and of diffusing desirable information among prospective customers. A very widespread interest in this matter has been developed in this country, as shown by the comments of the public press and the voluminous correspondence already resulting. The probable benefit in extending the foreign market for American butter seems to make it desirable to repeat the trials another year, with an enlarged field of operations.

EXTENSION OF MEAT INSPECTION.

The most pressing work of this Bureau for the coming year is the extension of the meat inspection to abattoirs engaged in an interstate business which have not yet been included in the service. Until all the establishments which kill for shipment to other States have been included the object of the law in preventing the sale of diseased carcasses for human food will not be accomplished, and there will be a discrimination in favor of those which have received the inspection and against those which have not been able to obtain it. There is also a demand for increased microscopic inspection, which is necessary to permit the marketing of American pork products in the principal countries of continental Europe. The exports of these products fluctuate largely from year to year, according to the condition of the market, and consequently it is impossible to foresee the expenditure

which will be necessary to properly provide for the trade. There should either be an emergency fund which can be drawn upon for this purpose or the Department should be authorized to charge a reasonable sum, say 5 cents per specimen, for the microscopic inspection, and the sum so collected should become additional to the appropriation, so that any demands made might be complied with. While I believe the general inspection of meats for sanitary purposes should be made by the Government without charge to the slaughterers, the microscopic inspection is to a great extent a commercial inspection, and the cost of it could be more legitimately assessed against the trade which it benefits. If the packers pay the cost of the inspection, there would be no longer any reason for declining to grant it to all who apply for it, and the inspection could be applied to as small pieces of pork as was deemed advisable. At present the inspection is demanded of pieces weighing only from $1\frac{1}{2}$ to 3 pounds, and on account of the cost of inspecting such small pieces a limit of weight has been set (5 pounds), which is more or less unsatisfactory to the trade.

The inspection of export animals must be continued in order to certify to their healthfulness and maintain the market which has been secured for them in other countries. At present our live animals are shut out of most of the countries of continental Europe, and it is only by inspection and certifying to their healthfulness that we can hope to have these markets reopened.

INSPECTION AND QUARANTINE OF IMPORTED ANIMALS.

The inspection and quarantine of imported animals must also be continued, in order to prevent the introduction of contagious diseases. While much progress has been made in the control of contagious diseases in the European countries from which our stockmen import live animals, most of these countries are now affected with either pleuropneumonia or foot-and-mouth disease, or both. The prospects are that there will be more importations from Europe during the coming year than for several years past, and consequently the expense of this inspection may be somewhat increased.

CATTLE AFFECTED WITH TEXAS FEVER.

The inspection and quarantine of cattle from the Texas fever district is an extremely important branch of the service, and it needs constant attention to prevent the infection of the central stock yards and the widespread dissemination of the contagion. When we consider that the quarantine line separating the infected from the uninfected district of the country extends from the Atlantic Coast on the east to the Pacific on the west, and is over 4,000 miles in length, the difficulty of preventing violations of the regulations and the unlawful movement of infected stock can be appreciated. During the present year there have been more violations of the quarantine than for sev-

eral years, owing, no doubt, to the increased demand for stock cattle. It will be necessary to take increased precautions during the next year to prevent the movement of cattle contrary to the regulations, or great damage to the domestic and export trade and a heavy loss of stock will result. The force during the present year is not sufficient to properly guard the line.

Experiments have been in progress for several years to destroy the ticks on Southern cattle by dipping them in a suitable mixture for this purpose. If the ticks could be easily and cheaply destroyed, the cattle would be freed from the danger of spreading infection. It has been very difficult to find a substance which would destroy the ticks without injuring the cattle. It is thought, however, that an agent has been found in the petroleum product known as paraffin oil, which will accomplish this satisfactorily. At all events, recent experiments have been much more favorable than those previously made, and the hopes of stockmen have been raised accordingly. If this plan of disinfecting the cattle proves successful, it will do away with most of the reasons for violating the quarantine and will no doubt save the stock raisers of the Southern States much loss and embarrassment in shipping which they now endure.

To properly apply this discovery for the benefit of the cattle industry of the whole country, dipping stations should be established by this Department at convenient points, and these should be operated under official supervision in accordance with stringent regulations. By adopting such a plan the dissemination of the disease will be prevented without any hardship to the cattle growers of the infected district. This service will require a larger number of inspectors than are now employed, but the benefit to the country, particularly to the Southern States, will be so great, amounting to many millions of dollars, that there should be no hesitation in putting it into operation.

ERADICATION OF SCABIES, HOG CHOLERA, AND TUBERCULOSIS.

Measures for controlling and eradicating the disease known as scab, or scabies, in sheep have been in operation for the past year, though they must be strengthened and made to apply more generally before the prevalence of the disease can be materially reduced. Experiments are being made with different sheep dips for the purpose of determining which is most efficacious and at the same time least injurious to the animal. Experiments are also being made to determine the best methods of treating and controlling hog cholera and tuberculosis. The losses from these diseases are extremely serious, and every effort should be made to reduce them. In order to accomplish this, it is plain that the Department must exercise fuller control over the movements of animals from one part of the country to another, and prevent the dissemination of contagion by stock cars in which diseased animals have been transported. It is probable that

more legislation should be enacted, giving the Department greater power in the stock yards that are used for interstate shipments, and that more positive authority should be granted for compelling the disinfection of cars and stock pens.

VACCINE FOR BLACKLEG.

The preparation and distribution of vaccine for blackleg has recently been undertaken, and a large number of applications for it have been received (amounting at this writing to over 30,000 doses) from stockmen whose animals have suffered from this disease. It appears that in considerable sections of the country the herds of cattle, particularly of important breeds, suffer to the extent of from 10 to 15 per cent of their number annually. It is believed from the reports of vaccinations in other countries that this loss may be reduced to less than 1 per cent.

The manufacture and distribution of tuberculin and mallein for the use of State authorities who cooperate with this Department in the control of contagious diseases should be continued. The tuberculin prepared here has proved to be reliable, and the fact that it can be obtained of the Department by State authorities has made it possible to continue the measures for suppressing tuberculosis where otherwise the expense would have made it almost impossible. It is probable that still greater quantities of tuberculin will be required for the coming year than were used during the past.

NEED OF AN EXPERIMENT STATION.

The work of this Bureau requires the use of an experiment station where a considerable number of experimental animals can be constantly kept. This is needed partly for the diagnosis of diseases met with in the inspection of meat and in the investigation of outbreaks of disease in various parts of the country, and also in the investigation of the nature of diseases and the best methods of treating them. The station which has heretofore been occupied by the Bureau has become insufficient for the purpose, and a change has therefore been made to a point farther from the city, and where more land can be obtained. The importance of continuing such investigations and of pressing them forward as rapidly as possible can not be overestimated, and no doubt the necessity for such work will continue for many years to come. I would therefore recommend that Congress be requested to authorize the purchase of suitable grounds for such an experiment station, and thus avoid the necessity of moving from place to place and abandoning the improvements which must necessarily be made where this work is being conducted.

PROPOSED WORK IN THE DAIRY DIVISION.

In the Dairy Division it is proposed that a special inquiry shall be made of mechanical aids to dairying, with a view of putting that

division in possession of complete, definite, descriptive information on this subject; also an inquiry in cooperation with other divisions as to the composition and healthfulness of the various materials used in this country as preservatives of milk and milk products; also an inquiry into the economy of creamery and factory management, including the utilization of waste products, with a view to devising methods for reducing the cost per pound in making butter and cheese. It is proposed to continue the efforts to develop the foreign markets for American dairy products, and it is recommended that Congress be requested to give authority to the Department to apply the funds received from the sale of dairy products shipped abroad by the Dairy Division to the purchase of material for other shipments. In this way, without increasing the expenditures, a very much larger quantity could be purchased and sent abroad during the year.

INSPECTION TO INCLUDE BUTTER, CHEESE, CONDENSED MILK, ETC.

It is suggested that an extension of the system of Government inspection and certification at present applied to meats and meat products for export, to include butter, cheese, and condensed milk, would be advisable and may perhaps be necessary in order to maintain the standing of our products in foreign markets. If a trade in pure butter or pure cheese is built up under existing conditions it may at any time be ruined through the shipment by unscrupulous persons of adulterated products or those which have been preserved with agents generally considered harmful. No doubt a certification limited to products which would grade above a certain fixed and arbitrary standard would be a great benefit and aid in building up and maintaining a greatly increased trade in such products.

INCREASED APPROPRIATIONS NECESSARY.

The Bureau has entered upon these various lines of work in most cases by specific direction of Congress and in others under instructions from the Secretary of Agriculture. The value of this work to the country and its urgency need not be enlarged upon, but it is evident that as the work develops and extends increased appropriations are necessary. The increase of the meat inspection alone from less than 4,000,000 animals in 1892 to 26,500,000 in 1897 means an enormous increase in the amount of work that is done and in the force required.

The appropriation, however, is less now than it was in 1892. It is not in the meat inspection alone that the work has increased, but in every other line that has been referred to. It is essential, therefore, for the proper conduct of the work that the appropriation be restored to the amount which was formerly given, and I would recommend that it be fixed at \$800,000, in addition to the statutory roll, for the year ending June 30, 1899.

GREATER LABORATORY FACILITIES NEEDED.

Finally, I invite attention to the great desirability of a fireproof building for the scientific laboratory. The building now occupied is unsuited for housing the valuable working material which has been accumulated during the thirteen years that the Bureau has been in existence. In the study of animal parasites, for instance, there have been intrusted to Dr. Stiles, our zoologist, the type specimens from the principal collections of the world. If these specimens were destroyed it would be an irreparable loss to science and to practical agriculture. So in each division of the work there are specimens, literature, indexes, and working material of all kinds which represent years of labor, and which could not possibly be replaced.

This laboratory is a practical workshop, which aims to make constant and immediate returns to the farmers for the full amount expended for the scientific work of the Bureau. It is accomplishing this by the distribution of tuberculin, mallein, and blackleg vaccine, by bringing out the best methods of treating diseases, by determining the nature of diseases which affect stock and informing the owners, and by perfecting methods for making cattle insusceptible to Texas fever and for killing the ticks which are the means of spreading the disease. This work is worth millions of dollars to our farmers, and should not only be encouraged but put beyond the danger of interruption and ruin by fires and other avoidable accidents.

The laboratory building now occupied is insufficient in capacity for the demands now made upon it. There are lines of work of great importance which can not be taken up. The biochemical side of butter and cheese making, including the microorganisms which play a part in these processes and the chemical changes which are due to them, should be thoroughly studied. More work should be done with a view to the perfection of methods for the control of hog cholera and tuberculosis. The expense of such work is insignificant when we consider the vast amount of property now lost annually by our farmers through the ravages of preventable diseases.

D. E. SALMON, *Chief.*

Hon. JAMES WILSON,
Secretary.

OUTLINES OF WORK PURSUED BY THE BUREAU OF ANIMAL INDUSTRY.¹

By D. E. SALMON, D. V. M.,

Chief of the Bureau.

The Department of Agriculture was impressed early in its history with many and difficult problems connected with the animal industry of the country that needed solution, but in regard to which the most enlightened agriculturists and the most expert scientific men were profoundly ignorant. Most important among these problems were the diseases which often caused disastrous losses. The second Commissioner of Agriculture had occasion to call attention, in his second and third annual reports, to "the prevalence of fatal maladies among all varieties of farm animals, resulting in the annual loss of not less than \$50,000,000," and recommended the establishment in the Department of a division of veterinary surgery. The next year, 1870, Commissioner Capron renewed the subject, referring particularly to a forthcoming report upon pleuro-pneumonia and Texas fever, diseases then prevalent and recently investigated under the supervision of the Department. He says in the annual report:

The value of stock lost annually from disease is enormous, and threatens not only to decimate our animals, but to expose the human family to disease from the consumption of unwholesome meats. Neglect of animals and their overcrowding in transportation are prolific sources of disease, and its spread is permitted by the ignorance of a majority of the present class of veterinarians. Another class of disease arises from causes obscurely known, if known at all, and these fatal maladies are as yet without any indicated effort of cure, rendering necessary the barbarous plan of stamping out * * * as the only means of saving the agriculturist or stock raiser from total ruin.

While recognizing the danger and losses from animal diseases, these observations emphasize the prevailing ignorance of the times. Veterinarians at that period were few and widely scattered, and how could they be expected to guard against the spread of contagion when they were seldom consulted, and under any circumstances were without authority to prevent the driving, the transportation, or the sale of affected animals, and the consequent unlimited exposure of other animals to the cause of these diseases!

The method of eradicating disease by the slaughter of affected and exposed animals, rather contemptuously referred to as "the barbarous plan of stamping out," must in many cases remain for all time the proper course of procedure. It is sentiment and not science that raises objections to it in those special cases where its application is

¹ Reprinted from Yearbook for 1897.

clearly indicated. With pleuro-pneumonia, for instance, it is absurd to allow animals affected with this important plague to remain alive as breeding places of the contagion a single hour after they can be properly killed. Until we can perform miracles and cure an animal in an instant, freeing it by the same instantaneous process of the power to transmit the contagion with which it is saturated, it will be folly to preserve and treat animals affected with plagues that are not already generally disseminated. The failure to recognize this axiomatic principle delayed for a long time the beginning of the work for stamping out pleuro-pneumonia, and threatened at times to arrest it before a fair trial of this method had been made.

Notwithstanding the attention given annually in the reports of the Department to special manifestations of animal disease, no specific appropriation of money was made for investigation until 1877, when Congress granted \$10,000 for such purpose, impelled by the prevalence of diseases among swine and cattle. Whatever the results achieved through the subsequent reports, published by the Department in 1878, in the way of educating stock raisers to avoid such diseases, the writer will only mention his own effort at that time to lay down some general principles for the investigation and successful management of contagious animal diseases in general. This method was developed more fully in the annual report for 1881-82, of which Commissioner Le Duc stated introductively:

The ultimate objects of Dr. Salmon's investigations have been, first, to discover the exact form and nature of the germ causing the diseases under consideration; second, to learn how it is distributed, and how this distribution can be prevented; third, the best methods of destroying the virus within as well as outside of the animal body; fourth, methods of rendering animals insusceptible to the effects of these germs; and, fifth, if it be possible, to establish breeds of animals that are insusceptible to such diseases.

To properly apply these principles, based upon the recent bacteriological discoveries, in order that the work might be of permanent value, a veterinary division was established in the Department in 1883, which was replaced by the Bureau of Animal Industry, the organization of which was directed by Congress in 1884. The effect of the labors carried on under the direction of this Bureau upon the health and value of farm animals and their products is a matter of world-wide knowledge; and it is at least possible now to modify the official statement made by the head of the Department in 1868, that our domestic animals "have all suffered from the local prevalence of malignant forms of disease, against which little veterinary skill is opposed, and little more than empiricism and superstitious folly is practiced."

NUMBER AND VALUE OF FARM ANIMALS IN 1884.

It is of interest, in connection with the above, to know both the number and value of the principal classes of our domesticated animals

at the time this large but sensitive source of wealth and convenience became officially represented in the Department of Agriculture. The following table, showing the number and value of these animals on January 1, 1884, is, therefore, prepared from Miscellaneous Bulletin No. 11 of the Division of Statistics:

Number and value of principal farm animals on January 1, 1884.

Animals.	Number.	Total.	Value.	Total value.
Horses.....	11, 169, 683	13, 063, 809	\$833, 734, 400	\$994, 040, 376
Mules.....	1, 914, 123		161, 214, 976	
Milch cows.....	13, 501, 206	42, 547, 307	423, 486, 649	1, 016, 715, 703
Other cattle.....	29, 046, 101		683, 229, 064	
Sheep.....		50, 626, 626		119, 902, 706
Swine.....		44, 200, 893		246, 301, 139
Grand total.....		150, 458, 635		2, 467, 808, 924

Five years later there were, according to the Eleventh Census, a little over 49,000 asses and 285,609,440 domestic fowls, and there were also 500,000 goats, all of undetermined value. The number of these was not much less in 1884, and at a low valuation they were jointly worth \$57,000,000, making the aggregate value of our domestic animals at that time not less than \$2,525,500,000. A striking fact is that should this Bureau be able to save to the owners of live stock by the information which it distributes and by its executive work but 1 per cent per annum of that value, this saving would amount to \$25,255,000 of their capital, at the comparatively insignificant cost of the annual appropriations which sustain the Bureau, whatever their amount may be. The real losses upon hogs, cattle, and sheep not killed by dogs, which died during the last census year, reckoned at \$10, \$15, and \$2 per head, respectively, were \$133,601,743, and over \$98,000,000 of this was in hogs. In addition to the possible and probable saving of 1 per cent per annum in live stock alone, there should not be forgotten the benefits to human health and the maintenance and increase of commerce in animals and their products, at home and abroad, through inspection, certification, and diminished insurance.

THE REASONS FOR THE ESTABLISHMENT OF THE BUREAU.

The immediate cause of the establishment of the Bureau of Animal Industry was the urgent need by the Federal Government of official information concerning the nature and prevalence of animal diseases and of the means required to control and eradicate them, and also the necessity of having an executive agency to put into effect the measures necessary to stop the spread of disease and to prevent the importation of contagion into the country, as well as to conduct the original investigations through which further knowledge might be obtained. Our exported cattle and sheep had recently been refused admission

into Great Britain and condemned to slaughter upon the docks where landed because of alleged contagious diseases in this country dangerous to foreign live stock. Our pork has been prohibited entrance into most of the countries of continental Europe because it was alleged to be infested with trichinæ, and therefore dangerous to the health and lives of the consumers. Twenty-five to thirty million dollars' worth of hogs were dying each year from contagious disease. Cattle raisers were in a condition bordering upon a panic from fear of Texas fever and contagious pleuro-pneumonia, and State restrictions were seriously interfering with interstate traffic in bovine animals. Sheep raising had become precarious in many sections because of scab and other parasitic diseases. The repeated demands and agitation for governmental assistance culminated in 1884 in the enactment of the organic act of this Bureau.

THE PLEURO-PNEUMONIA PROBLEM.

The most pressing duty devolving upon the new Bureau was to arrest the extension of pleuro-pneumonia and, if possible, eradicate that disease from the country. In attempting to perform this duty, it developed that notwithstanding the investigations and reports of scientific men, the Commissioner of Agriculture, under whom that work was to be entered upon, doubted the existence of the disease in the United States. The prevalence of some peculiar disease of cattle in certain portions of the country was evident, and elaborate experiments were made to demonstrate whether or not it was of a contagious nature. After this demonstration had been made it was necessary to secure further authority from Congress before effective work could be undertaken. By the original legislation, only diseased animals could be purchased for slaughter; but the contagion could not be eradicated or appreciably diminished while exposed animals were left in the stables to develop the disease and infect other animals. It was not until 1887 that authority to use the appropriation for the purchase and slaughter of exposed animals was received. From that time forward there were no extensions of the disease into fresh territory, and the infected districts were rapidly freed from it. The work was at first concentrated upon Illinois, Kentucky, and Maryland, and the contagion eradicated from the first two and controlled in the last. Then the remainder of the infected district, which was included in the States of Pennsylvania, New Jersey, and New York, was embraced in the field of operations. In five years from the time the work of eradication by slaughter of both diseased and exposed animals was commenced the disease was officially declared to be eradicated. Since early in 1892 no case of contagious pleuro-pneumonia of cattle has been discovered in the United States, and events have consequently confirmed the thoroughness and reliability of the work.

It is almost impossible at this time to give an idea of the danger

with which the cattle industry was menaced by the spread of that fatal and treacherous disease to a point so far in the interior as Chicago, or of the difficulties under our form of government of promptly and effectually meeting the emergency. Fortunately, although the cattle owners in the infected districts were not friendly, the State authorities cooperated in every case and supplied the power which was lacking in Federal legislation. And although there were many who questioned the existence of the European lung plague in this country, who did not believe in the success of the measures that were adopted, who were positive that the disease could not be eradicated, or who were certain that untold millions of money would be squandered before the end was reached, the result was accomplished with an expenditure of less than five years of time and of \$1,500,000—a sum which is less than 5 per cent of the value of the beef exported in 1892.

When we consider that the Governments of Great Britain, France, and Germany all undertook the work of eradicating pleuro-pneumonia long before the establishment of our Bureau of Animal Industry, and that none of them have yet succeeded in freeing their territory from the plague, we can appreciate the fact that the completion of our task in a comparatively short time was a notable achievement.

TEXAS FEVER.

A disease which was causing much heavier direct losses than pleuro-pneumonia, and which was almost equally feared by cattle owners, was known by the local name of Texas, or Spanish, fever. This disease, which has numerous popular and local names, has more recently been called by different writers splenic fever, Southern fever, and tick fever.

When investigations of this disease were first entered upon by the Department of Agriculture there were the most profound ignorance and skepticism in regard to its nature and even its existence. Cattle owners in the Southwest and Middlewest asserted that the herds from the Gulf coast of Texas carried with them a poison that destroyed nearly all the cattle with which they came in contact. So virulent was this poison declared to be that cattle which were simply driven across the trail of the Gulf-coast herds, thirty, sixty, or even ninety days after they had passed, would still contract the disease in the same proportion and in as fatal a form as if they mingled directly with the Southern animals. To these assertions were added others to the effect that the Gulf-coast cattle were healthy, and that the susceptible cattle to which they conveyed a disease which they themselves did not have were, even when fatally affected, unable to transmit the malady or disseminate the virus to any other cattle.

A few observations of a similar nature had been made in the Eastern States. Cattle from North Carolina and South Carolina, though

apparently in good health, had caused outbreaks of disease among the cattle of Virginia, Maryland, and Pennsylvania, which had mingled with them or grazed along the roads over which the Carolina animals had been driven.

The general features of this disease, as described by the various observers, were so unusual, so entirely different from what was seen in any other known communicable malady, that the correctness of the observations was not generally accepted by scientific men, and perhaps the majority of stockmen were of the opinion that the malady was the result of some local conditions, and was incorrectly attributed to poison disseminated by the Southern cattle. The cattle raisers of Texas were indignant at the charge brought against their herds, which they asserted were as healthy as any in the world, and, not having a disease, could not convey one.

The allegations and discussions in regard to this mysterious disease were almost forgotten, when, in 1867 and 1868, the herds of the Gulf coast had recovered from the destructive effects of the war and appeared upon the markets and feeding grounds of the Northern States in great numbers. With the warm weather of summer there appeared a remarkably acute and fatal disease among the native cattle in the sections where the Southern animals had been grazed and marketed, which threatened the utter destruction of the native herds, and even of the milch cows kept in the vicinity of the stock yards of the principal market cities.

These serious and widespread losses demonstrated conclusively the reality of the disease, while careful observations and elaborate reports made by Professor Gamgee for the Department of Agriculture, and by the boards of health of New York and Illinois, served to collate and record all that was then known of the symptoms, mode of transmission, the general characteristics, and the changes found in the several organs upon post-mortem examination.

The problem presented to the country was a most important one. There were millions of cattle in Texas, Louisiana, and Mississippi seeking a market, and other millions of cattle in the more Northern States liable to destruction by this fatal infection which they carried. The ranges of the West and Northwest needed these Southern animals to consume their grass, and vast herds were driven through Kansas and Colorado, Nebraska, and Wyoming to the most northern limits of our territory. The owners of cattle along these trails were heavy losers from disease, and hence there was an effort to confine these infectious herds to narrow trails, or even to close the trails entirely. This action was resented by the Southern men, who still were not convinced that their cattle caused disease, and who looked upon these restrictions as efforts to avoid competition and prevent the marketing of the herds from the prolific ranges of the South. The time had come when it was necessary for the Federal Government to assist both parties. It

was essential to protect the Northern herds from destruction and scarcely less important to provide for the marketing of the Southern cattle.

Another danger threatened the cattle industry in connection with this disease. Our export trade in live cattle, which was giving an important outlet for our surplus stock, was looked upon by foreign governments with suspicion. It was feared that Texas fever might be introduced among the cattle of Europe and added to the numerous plagues that they had struggled with from time immemorial. The limitation to the spread of the disease, due to the failure of the sick animals to transmit the infection, and the eradication of the disease in newly infected districts by the frosts of winter, were characteristics so unusual that they were not accepted as correct. As a great cattle-producing nation, we could not afford to allow the foreign markets to be closed against us. The Texas fever question was, consequently, one of the most momentous ones which confronted the Bureau at the time of its organization.

The first step toward the control of this disease was evidently to ascertain the exact extent of the district from which cattle carried infection. To determine this, three classes of facts were available: First, the history of the cattle which had caused outbreaks of disease could be traced, and it could be learned where they originated; second, by diligent inquiry many sections could be discovered where cattle taken from the North were affected with the disease called "acclimation fever," a disease which we had found was identical with Texas fever; and, third, it could be determined by observation and experiment whether the cattle of any particular section were susceptible to the disease, and if they contracted Texas fever upon exposure to cattle from the known infected district, that fact was evidence that the district in which they were raised was not infected. By a diligent collation and study of such facts the border line of the infected district was traced from the Atlantic Coast in Virginia to the Pacific Coast in the vicinity of San Francisco, a distance, allowing for the departures from a direct course, of about 4,000 miles.

The scientific study of the disease had not been neglected, and it was found that the infectious cattle could be shipped to market without endangering other animals, provided separate pens were set apart for them at the stock yards where they were unloaded, and provided the cars in which they were shipped were properly cleaned and disinfected. The settling of the Western States and the construction of railroads led to the marketing of cattle from the infected district without much driving, and the trail was gradually abandoned except during the winter months.

The regulations of the Bureau hastened this solution of the difficulty. The border line of the infected district was made a quarantine line. No cattle were permitted to cross this line between February

15 and November 15, except for immediate slaughter. The cars carrying such cattle and the waybills accompanying them were marked to show the origin of the stock, and when the destination was reached the animals were unloaded into quarantine pens and the cars were disinfected under the supervision of an inspector. From November 15 to February 15 (changed to January 15 for 1898) the movement of cattle was allowed without restriction. By these comparatively simple measures the dissemination of the disease was almost entirely prevented, and the cars and stock yards used for Northern and export cattle were kept free from the contagion.

In this manner the most urgent problems in connection with the disease were solved, but others of great economic importance still remained. Buyers took advantage of the fact that the Southern cattle must be sold for immediate slaughter, and would not pay as much for cattle in the quarantine pens as they would for the same class of stock in the free pens. Hence, the regulations were more or less of a hardship to those who produced cattle within the infected district. Again, cattle taken from the Northern States to the infected district for breeding purposes and to improve the native stock were subject to the disease, and from 75 to 100 per cent would die the first year. This was very discouraging to the breeders of that section, who desired to produce the most improved varieties of cattle, but who were prevented from doing so by the presence of this infection.

The peculiarities of Texas fever made it a most difficult disease to investigate, and it seemed at times as though its mysteries could never be fathomed. By diligent and persevering observations the Pathological Division discovered in the blood of diseased animals a microscopic animal parasite which lives within and destroys the red blood corpuscles, and is evidently responsible for the causation of the malady.

It was also discovered that the Southern cattle tick (*Boophilus bovis*) carried this microorganism from the infectious cattle of the South to the Northern susceptible animals, and that when free from the tick the Southern cattle were harmless.

It is impossible in this paper to enter into all of the interesting details, but it may be said, without attempting any demonstration of the statements, that these discoveries made it possible to mark out the lines of investigation by which alone any further progress could be made. Investigators were put to work to discover a mixture in which Southern cattle might be dipped to free them from the tick; also to work out a method of inoculation or vaccination by which Northern stock might be made immune to the disease before they were shipped South for breeding or other purposes; and, finally, to ascertain whether it was possible to eradicate the tick in the infected district, and by what means.

These great questions have been patiently studied, and it is now possible to state that these studies appear to be reaching a successful

conclusion. A cheap and comparatively efficient dip has been made by floating paraffin oil upon the surface of water. This has some disadvantages, but these apparently are not serious, and improvements will undoubtedly be made after the system of dipping is put into practical operation. Again, it has been proved that if young Northern cattle are inoculated by injecting under the skin late in the fall or in the winter from 5 to 10 cubic centimeters of blood from an infectious Southern bovine animal they contract a mild form of Texas fever and recover. Afterwards they may be taken to the infected district without much danger from subsequent attacks. The eradication of the tick, although a serious problem, is not so hopeless as a first impression might lead one to suppose. Some farms have been freed from this insect by picking all of the ticks off the cattle and allowing none to mature. In a year or two they disappear entirely. A number of counties in Virginia, which prohibit cattle from running at large, have apparently been freed from ticks by that measure. It would appear that this tick can only mature and reproduce its kind by passing a portion of its existence upon bovine animals, and that the whole species will die out within a year or two if they can not reach such animals. If this supposition is correct, then it is only necessary to fence up a piece of ground so that no cattle can get upon it for the period of time mentioned, in order to rid it from infection.

From this brief statement of the case it is plain that cattle raisers may congratulate themselves that the most difficult problems connected with this disease are solved, and that it is only a matter of detail to put into effect measures which will obviate the hardships and losses that in the past have been so burdensome.

INSPECTION, TAGGING, AND CERTIFICATION OF EXPORT CATTLE.

The fear expressed by foreign governments of the introduction of pleuro-pneumonia and Texas fever with cattle from the United States made it necessary to adopt some method by which the history of the animals exported could be ascertained and the animals inspected, numbered, and recorded, so that a certificate could be issued showing freedom from contagion. Occasionally it was alleged by the English inspectors that some of our cattle were suffering from pleuro-pneumonia when landed at the British ports. In two cases German inspectors reported our cattle affected with Texas fever when they reached Hamburg. The German reports plainly show that the two lots of cattle were not affected with the same disease, and that the diagnosis in one case at least must have been incorrect. Such occurrences, however, emphasize the importance of supervising the trade, as our live cattle and fresh beef have been entirely excluded from Germany since this alleged discovery of disease.

It was found at first to be by no means a simple matter to obtain the history of the cattle purchased for export and to mark them for

identification with a numbered tag. Such tags had been put in the ears of cows in the pleuro-pneumonia inspection without any serious trouble, but it was quite another kind of work to go into the stock yards and put tags in the ears of the powerful and bellicose steers, many of which had never recognized the sovereignty of man. By perseverance, however, the details of a practical system were worked out. Tagging chutes were constructed, through which the cattle passed in single file and where the tag could be easily attached to the ear with an ordinary hog ringer. The cattle were tagged at the first stock yards to which they were shipped, their feeding places were ascertained, a note was made of the cars in which they were forwarded, and the Bureau inspectors at the next unloading point, and also at the port from which they were to be exported, were notified. With this system in operation the inspector at the port could conscientiously give a certificate of freedom from contagious disease after the animals had passed his inspection.

The number of inspected and tagged cattle which were exported during the year ended June 30, 1897, was 390,554. Sheep are also inspected before exportation, but are not tagged, and of these animals 184,596 were inspected. To properly examine and supervise the loading of so many animals, to tag the cattle and see that they are shipped from the interior to the seaboard without exposure to contagion either in cars or pens, and to obtain and record the history of the cattle is alone a very extensive work and one which requires constant vigilance and attention. In every case where disease has been reported from England we have been able to retrace the path of the animal to the farm where it was raised, and in none of the alleged cases of pleuro-pneumonia reported since March, 1892, could any trace of that disease be found either at such farms or anywhere in the vicinity—evidence which demonstrates that, whatever the disease may have been, it was not contagious pleuro-pneumonia.

By such measures the British contention has been proved erroneous, and, although the regulation requiring the slaughter of our animals at the foreign-animals wharves has not been removed, further limitations have been prevented, and we have held the trade for nearly 400,000 cattle and 200,000 sheep.

REGULATION OF SHIPS THAT CARRY EXPORT CATTLE.

Another danger that menaced our export cattle trade had its origin in the improperly fitted ships and in the alleged cruel treatment of the animals on shipboard. In the early years of the transatlantic traffic, before the commodious cattle boats of the present day were constructed, these animals were largely carried on "tramp" ships, with temporary fittings and without facilities for supplying the proper quantities of feed and water. The attendants were often inexperienced and worthless. The space was overcrowded. The ventilation was insufficient. The boats were occasionally unseaworthy.

As a result of these conditions, there were frequently reports of ships arriving in the British ports, after an unusually long voyage, with the feed and water exhausted and the animals suffering from hunger and thirst. Sometimes during storms it was necessary to batten down the hatches, and then, on account of deficient ventilation, large numbers of animals would die asphyxiated. Again, it occasionally happened that in heavy seas the weight of the cattle would be thrown upon the halters with such force that the fastenings would give way and the animals be mixed and jammed together in the greatest confusion. If the attendants were inexperienced and unequal to the occasion, some of the animals would be crushed and trampled to death, others would be bruised and maimed, and the general appearance of those landed would make a most unfavorable impression. In still other cases a great wave would sweep the decks, tearing the temporary fittings from their supports and carrying both fittings and cattle together into the sea.

Such occurrences could not fail to attract the attention of humane people abroad, particularly when the sentiment of humanity was intensified by the desire to limit American competition. The barbarities of the transatlantic cattle traffic were depicted by the pen of romance, the cruelties were exaggerated and magnified, atrocities were described that never were committed, and illustrated pamphlets were prepared and circulated in order that the full power of sensationalism might be invoked. As a result of this agitation a bill was presented in the British Parliament to prohibit the importation of live cattle from beyond the seas, and the Queen was strongly urged, in the name of humanity, to use her influence to secure its passage.

This emergency was met by Congress through the passage of the act of March 3, 1891, authorizing the Secretary of Agriculture to enforce necessary regulations to secure the safe carriage and humane treatment of cattle exported from the United States. Careful investigations were at once made by the Bureau and regulations formulated which were acceptable to the British Government. The rigid enforcement of such regulations drove the poorer class of ships out of the trade. Magnificent iron ships were constructed for the cattle traffic, with every convenience, with permanent fittings built into the vessels, and having all the comforts and safety which human ingenuity could provide. The losses were soon reduced to the minimum of about one-third of 1 per cent. The cattle were unloaded in as good condition, as vigorous and active, as they were when they went on board. As a result of the improved conditions and the greatly diminished losses, insurance rates were reduced from \$8 and upward per head of exported cattle to less than \$1 per head. This saving in insurance alone, with an average exportation of 325,000 head, amounts to \$2,275,000 per year, nearly three times the entire cost of maintaining the Bureau.

In this elaborate system for determining the healthfulness of its exported animals and for guarding them from infection, injury, and cruel treatment, the United States stands alone among the nations of the world, and its certificates should have great weight in any country that is fairly disposed toward our products.

MICROSCOPIC INSPECTION OF PORK FOR EXPORT.

In 1881 our pork was prohibited entrance into Germany, France, and the principal countries of the continent of Europe, on the ground that it was infested by trichinæ and was injurious to human health.

Notwithstanding the fact that it could not be shown that our pork had caused disease, and that it was manifestly more wholesome than the European pork, and notwithstanding the most vigorous protests were made by the American Government, the trade was crushed and destroyed. The year before the prohibition went into effect we sold to France 70,000,000 pounds and to Germany 43,000,000.

For ten years our pork was shut out of nearly every market of continental Europe, when in 1891 the Bureau began the microscopic inspection and certification of pork destined to the markets of the prohibiting countries. This action led to the removal of the prohibitions, but the restoration of the trade was a slow and difficult process. Our brands of meat were no longer familiar to the people of those countries, commercial connections had been severed, and requirements as to cuts and cures had materially changed. It was like introducing an article into a country for the first time. Moreover, the prohibition had engendered suspicion as to the wholesomeness of our product, while the agitation had established prejudice and antipathy. There were vexatious and burdensome restrictions by both the general and municipal governments.

Notwithstanding such adverse conditions, the trade with these countries has continued to grow until now it requires more meat than the Bureau is able to inspect with the available appropriation. The following table shows the pork which has been microscopically inspected and the quantity which has been sold in the countries referred to since this inspection was inaugurated:

Shipments of pork microscopically inspected, fiscal years 1892-1897.

Year.	To countries requiring inspection.	To countries not requiring inspection.	Total.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>
1892.....	22,025,698	18,127,178	38,152,874
1893.....	8,059,758	12,617,652	20,677,410
1894.....	18,845,119	16,592,818	35,437,937
1895.....	30,355,230	5,739,868	45,094,598
1896.....	21,497,321	1,403,559	22,900,880
1897.....	42,570,572	1,001,783	43,572,355

The difficulties met with in the inauguration of this system of inspection were very serious. There had been no microscopic inspection on a large scale in America, and we had neither the appliances nor trained inspectors. The glass compressors for preparing the specimens of meat and the microscopes used in the German inspection were considered too clumsy and not adapted to accurate or rapid work. An American type of microscope was, therefore, selected, the stage was grooved so that an examination of every part of the specimen was insured, and a special form of compressor was adopted which greatly facilitated the work.

The cost of microscopic inspection was estimated before the work was begun all the way from 15 to 50 cents per carcass. The actual cost has been reduced to less than 6 cents per carcass. The packers asserted that it would be impossible to microscopically examine any considerable quantity of pork without delaying their business and damaging the meat. These fears proved to be groundless. The work of the abattoirs has neither been obstructed nor the meat injured. On the contrary, there are now from all points the most urgent appeals for more microscopic inspection.

THE GENERAL MEAT INSPECTION.

By the act of March 3, 1891, Congress directed the Secretary of Agriculture to inspect previous to their slaughter all cattle, sheep, and swine the carcasses of which were to be disposed of through the interstate or foreign trade, and authorized him in his discretion to make a post-mortem inspection. This enormous undertaking was added to the many other duties of the Bureau.

The general meat inspection was designed to protect our domestic consumers from the meat of diseased animals and at the same time to enable the Government to certify to the wholesomeness of exported meats. It was specially provided that no beef should be allowed to go abroad unless it had been inspected and was certified as free from disease.

The magnitude of this work was probably not appreciated by Congress at the time the legislation was enacted, although the desirability of such an inspection is incontestable. Owing to the great extent of our territory and the enormous number of animals slaughtered it was impossible at once to cover the whole country. It was necessary to instruct inspectors and to devise a system of administration with proper safeguards. Beginning at a comparatively few abattoirs, the service has been gradually extended until it is now established in 33 cities and covers the product of 128 abattoirs.

The animals are first examined while in the stock yards, either at the time they are unloaded from the cars or when they are driven upon the scales to be weighed. Another examination is made of the car-

casses immediately after slaughter and when the viscera are being removed. Carcasses are condemned if found affected with any serious disease, or if the animals are emaciated, too far advanced in pregnancy, or have recently given birth to young. They are also condemned when too young to produce wholesome meat.

The condemned meat is put into the tanks with the offal, cooked with steam, and made into fertilizer. The sound meat goes forward with a meat-inspection stamp upon cases and boxes and with a tag or brand upon carcasses and pieces. It has been a very troublesome matter to obtain a satisfactory method of marking inspected meat for identification that would not be at the same time too expensive. A tag attached with a wire and lead car seal has been generally used upon carcasses, but is quite expensive, costing from \$1.40 to \$2.25 per thousand, according to the kind, and the cheaper forms are liable to be tampered with. Such a seal, to be satisfactory, should be so constructed that it can not be removed from one piece of meat and attached to another without plainly showing that it has not been properly applied.

The expense of seals and the difficulty of securing those that could be depended upon early led to experiments in branding. A hot iron was discarded for this purpose because of inconvenience and danger of fire. Branding ink has been used in some European countries, but samples imported gave marks which were too easily blurred and removed by friction or moisture to be of any use under the conditions which obtain in this country. The Biochemic Division has, however, after much experimenting, produced an ink which is a great improvement on any we have found elsewhere, and which promises to largely supplant the more expensive and laborious methods of marking that have been heretofore in use. Many gallons of this ink have been satisfactorily used in the work of the Bureau during the past two years.

It is impossible in this brief account of the work of the Bureau to give more than the merest outline of the meat-inspection service. It was intended by Congress that all meat shipped from one State to another should be previously inspected, but the appropriation up to the present has not been sufficient for this purpose. The inspection force, however, is being enlarged as rapidly as the appropriation will permit. The inspection is, therefore, having a healthy growth, which, if it is continued for a few years longer, will cover all of the meat prepared for the interstate trade, and then it can no longer be said, as it has been said occasionally in the past, that we are more particular for the people of Europe than for our own people in affording protection from unwholesome meat.

The following table shows the number of animals inspected before slaughter from 1891 to 1897, thus giving an intelligent idea of the growth of the inspection service and the enormous number of animals

that are annually slaughtered in the United States for the preparation of food products:

Animals inspected for abattoirs having inspection, fiscal years 1891-1897.

Year.	Cattle.	Calves.	Sheep.	Hogs.	Total.
1891.....	83,891				83,891
1892.....	3,167,009	59,080	583,361		3,809,450
1893.....	3,922,174	92,947	870,512		4,885,633
1894.....	3,862,111	96,831	1,030,764	7,964,860	12,944,056
1895.....	3,752,111	109,941	1,344,081	13,576,917	18,783,050
1896.....	4,050,011	213,575	4,710,190	14,301,963	23,275,739
1897.....	4,239,058	259,980	5,179,643	10,813,181	26,541,812

THE INSPECTION AND QUARANTINE OF IMPORTED ANIMALS.

One of the first steps taken for the control of contagious diseases among animals was the establishment of quarantine stations at the principal Atlantic ports, where imported animals might be detained until there was no longer any danger of the development of disease from exposure to contagion in other countries. These stations were at first under the direction of the Treasury Department, but soon after the organization of the Bureau of Animal Industry they were transferred to its control.

There are a number of destructive diseases in other parts of the world which it was necessary to guard against. Pleuro-pneumonia had already been imported and had caused us an endless amount of anxiety, trouble, and expense. Foot-and-mouth disease had several times reached our shores, and it was rather by good luck than good management that we had escaped a visitation reaching to every State of the Union and to every part of the American continent. Rinderpest existed in European and Asiatic countries, and there was always danger of its importation to America.

We had taken the risk of these plagues for years without giving them much thought. Our people, always buoyant and optimistic and never willing to seriously consider danger or admit the possibility of trouble until it is upon them, could never be brought to realize the danger to which they were exposed until restrictions upon our export trade convinced them that something should be done at once. The establishment of quarantine stations furnished the necessary means to exclude further importations of contagion, and permitted us to undertake the eradication of pleuro-pneumonia with confidence that when the existing centers of the disease had been discovered and stamped out we should not be troubled by new outbreaks caused by imported cattle.

The wisdom of maintaining the quarantine of animals from countries in which contagious diseases exist is shown by the terrible epizootic of rinderpest which for two years has been spreading over

South Africa, almost annihilating the stock of bovine animals. The contagion was doubtless introduced from Asia, and neither its existence nor the perils from it were sufficient to arouse the people to that prompt and vigorous action by which alone it could have been arrested. And now we see it sweeping across the country like a wall of fire, irresistible, seizing upon every herd, and claiming from 90 to 100 per cent of the animals as victims.

Science has at last been able to do something to mitigate these losses. A method of vaccination has been adopted which will possibly save 60 per cent of the animals to which it is applied, but even with this in operation, the disease is a great calamity. Such a visitation of disease in the United States would cost us hundreds of millions of dollars directly, and many years of labor to recover from it.

Three stations are maintained on the Atlantic Coast—one at the port of Boston, one at New York, and one at Baltimore. In the early years of these stations, several importations of animals affected with foot-and-mouth disease were detected, and one importation of pleuropneumonia was discovered in the Canadian quarantine. During recent years certificates of healthfulness and freedom from exposure have been required to accompany imported animals, and permits for importation are refused for animals from countries in which dangerous contagious diseases are prevalent.

The inspection system has been extended so as to include the frontiers bordering upon both Canada and Mexico. For a number of years all cattle from the United States were quarantined three months by Canada, and all cattle from Canada were quarantined three months by the United States. By mutual arrangements these quarantines have been removed, and at present animals accompanied by proper certificates of health are permitted to cross the frontier in either direction without detention. Cattle from Canada for breeding or dairy purposes must have been tested with tuberculin and found free from tuberculosis, otherwise they are quarantined one week and tested by the inspectors. This regulation is required for protection against tuberculosis, and is of special importance to those States which are trying to control the disease.

Along the Mexican frontier the principal problems are to prevent the importation of animals carrying the contagion of Texas fever and sheep scab. Mexico has her Texas fever districts as well as the United States, and sheep scab there is a most common and virulent disease. It was necessary, therefore, to inspect carefully all of the nearly 300,000 head of cattle and of the 43,000 sheep imported last year from that country. If cattle from the tick districts of Mexico are allowed entrance into the noninfected region of the United States, they cause heavy mortality among our native stock; and if cattle from the elevated section of Mexico, free from infection, are forced to cross the boundary where they will enter our Texas fever district,

then the imported cattle contract the disease and die in large numbers. Hence the necessity of expert inspection and great care in carrying out the regulations.

Notwithstanding the numerous sources of disease in other countries from which the animals must be imported and the vast numbers of animals which are annually brought to our country from abroad, the Bureau has successfully protected our animal industry from exotic contagion. The quarantine stations and the inspection of imported animals have therefore fulfilled their purpose.

THE HOG CHOLERA QUESTION.

The great losses from the contagious diseases of swine early attracted the attention of the Department and of Congress, and an appropriation for the purposes of investigation was made in 1878, with annual provisions for continuing this investigation until the present time. Two diseases, closely resembling each other, yet caused by distinct germs, and frequently both affecting an animal at the same time, have been recognized. The question of formulating practical measures for controlling these diseases has been as difficult as it is important. While most prevalent in the great corn-producing States, the diseases have been carried to all parts of the country, and, therefore, any regulations to be effective must be enforced over a wide extent of territory, and would be correspondingly expensive. The losses have, however, been tremendous, being placed by some as high as \$100,000,000 a year; an estimate which does not appear exaggerated in the light of the careful inquiries in the State of Iowa, from which it was concluded that this one State lost from \$12,000,000 to \$15,000,000 worth of swine in a single year.

The scientific investigations relating to this subject have been persistent, careful, and comprehensive, and the problems that are to be met have been very clearly defined. Passing over the details of these investigations for the sake of brevity, the efforts now being made will alone be discussed. There are but two methods of control which, from our present knowledge of the contagious diseases of swine, appear to promise adequate results. One is the old stamping-out method, the slaughter of diseased and exposed animals, the quarantine of infected farms, the regulation of transportation, and the disinfection of stock cars, stock pens, infected farms, and all other places harboring the contagion. The other is the treatment of diseased and exposed animals with antitoxic serum. Both of these methods have been tried to a limited extent during the past year.

The stamping-out method is attended by many difficulties and limitations. Farmers often object to the slaughter of exposed animals which are still healthy, unless paid more than the animals are worth, and they are unwilling to have their breeding stock killed so long as there is a chance of saving a part of it. On the other hand, it is

embarrassing, if not impossible, for Government officials to utilize in any way the carcasses of exposed animals which have not yet developed symptoms of disease, and to destroy these adds largely to the expense. Again, it is next to impossible to control transportation and the disinfection of cars so as to prevent constant reinfection. The disinfection of farms is also a troublesome matter, as the germ of hog cholera has great vitality, and is able to maintain its existence and virulence in the soil, in moist organic matter, and even in water, for several months. Finally, the wide distribution of the disease, the ease with which the contagion is carried, the numerous agencies which contribute to its spread are all elements which increase the gravity of the problem and militate against the success of the stamping-out method.

The use of antitoxic serum appears at present to be a much more promising method of diminishing the losses, and it is possible that it may be combined with sanitary regulations, such as quarantine of infected herds, disinfection of premises, and supervision of transportation, so as to give the advantages of the stamping-out method while avoiding many of its embarrassments. The serum is prepared by inoculating horses or cattle with cultures of the disease germs and repeating these inoculations with gradually increasing doses until the animals have attained a high degree of immunity. The blood of such animals injected under the skin possesses the power of curing sick hogs and of preventing well ones from becoming infected. Unless the blood is to be used immediately after it is drawn, which is not often the case, it is allowed to coagulate or clot, and the liquid portion, or serum, is separated and preserved for future use.

The Bureau has been diligently working for several years to bring the serum treatment of hog cholera to the highest degree of efficiency. The most important point is, of course, to secure a serum with a high protective and curative power. This is by no means an easy task. The products of the hog cholera germ are very irritating, and when injected into the tissues their tendency is to cause paralysis and death of the part, with the formation of large abscesses. The intense local action hinders the absorption of the cultures into the general circulation and prevents the animal from acquiring immunity. It is doubtless for this reason that the inoculation of swine has generally failed to give the necessary degree of protection and that inoculated swine are found to contract cholera when they are afterwards exposed.

The serum produced in 1897, when used in affected herds, saved over 80 per cent of the animals. During the past few months the methods have been considerably improved, and it appears probable that a serum of higher efficiency will be the result. There is no danger connected with the use of this serum, as it is absolutely free from the germs of the disease. It is easily applied, and the good effects in sick hogs are seen almost immediately: There is every reason to

believe, therefore, that we have in this serum a practicable method of preventing the greater part of the losses from hog cholera, but it must be tested upon a larger scale before absolute assurance can be given. It is hoped that all doubts may be cleared up by the experiments planned for 1898.

TUBERCULOSIS.

Although the Bureau has not attempted to enforce regulations for eradicating tuberculosis in any section of the country, it has, in many cases, cooperated with State and municipal authorities which were working with this object in view. The Biochemic Division manufactures tuberculin, which is furnished to local authorities for official use. During the past year sufficient tuberculin to test 50,000 cattle was thus distributed.

Cattle for breeding and dairy purposes which are imported from Canada must be accompanied by a certificate that they have been tested for tuberculosis, and lacking this they are held in quarantine and tested by the inspectors of the Bureau. A number of States also have regulations requiring similar tests for these classes of cattle, and the Bureau inspectors at the various stock yards cooperate with the State authorities by inspecting the animals and giving notices of shipment.

BLACKLEG.

The disease known as blackleg, quarter evil, or symptomatic anthrax is one which has long been dreaded by the producers of beef cattle, because it appears suddenly among the young stock, affects the best and most promising animals, and is almost invariably fatal. It has a great tendency to discourage stockmen in their efforts to improve their cattle, because the best bred animals are the ones most certainly affected. Many plans of prevention have been adopted, such as bleeding, setoning, feeding upon diuretics and alteratives, all with the object of keeping down the condition, and thus making the animals less susceptible.

Such methods of prevention, while only partially successful, are opposed to the principles of successful husbandry. The stock raiser should have the best breeds for his purpose, and he should keep them thriving and growing rapidly, without check or hindrance. Methods of preventing disease which tend to arrest the development of his young stock are distasteful to him and more or less unprofitable.

Vaccination was proposed as a preventive fifteen years ago, and has been adopted to some extent, but was never very popular on account of two vaccines being used with an interval of ten days or two weeks. The efficiency of these vaccines has also been questioned. Experiments made by the Pathological Division have demonstrated that cattle may be vaccinated with much less trouble and expense and with greater efficiency by the use of a single properly prepared vaccine.

A few months ago a circular letter was distributed, offering to supply vaccine prepared in the Bureau for experimental purposes upon application by the owners of cattle, providing a report were made as to the losses from this disease and the effects of the vaccination. The information thus received has been very surprising. It appears that blackleg causes greater losses in some of the Southern and Western States than all other diseases combined. These losses are placed at from 10 to 20 per cent of the young stock.

About 100,000 doses of the vaccine have been distributed, and reports show that it can be safely used by the owners of cattle and that the deaths from blackleg soon stop after the herd has been vaccinated.

SHEEP SCAB.

Scab of sheep should not be allowed to exist in any sheep-raising country. It is caused by a parasite which is easily killed and eradicated, and if this parasite is exterminated the disease will no longer develop. The continued existence of such a disease is a reflection upon the intelligence and humanity of a people.

Notwithstanding these facts, sheep scab has for many years been one of our most common, widespread, and destructive diseases. The time has come when the disease should be controlled and eradicated. In order to assist in this, the Zoological Laboratory of the Bureau has been making experiments with various remedies in order to determine which are most effective in curing the disease, and which cause the least damage to the wool and to the general condition of the animals.

The information obtained in this manner has been collated and will be published [see p. 98], in order that sheep growers may avail themselves of it before sending their animals to market. The shipper of diseased sheep must always expect to lose money upon them. They may be quarantined, they may be condemned as unfit for the production of human food, they may be subjected to charges for dipping before being forwarded from one State to another, and under any circumstances the purchaser is unwilling to allow the full price of healthy animals. It is, therefore, greatly to the advantage of the sheep raiser to eradicate the disease from his flock before any are marketed. This the Bureau proposes to assist him in doing by furnishing information as to how to make and apply the best remedies.

ANIMAL PARASITES AND PARASITIC DISEASES.

The study of animal parasites and the diseases which they cause has until recently been greatly neglected in this country, and yet the subject is a most important one. A brief mention has just been made of scabies in sheep, but this species of animal is subject to many other serious parasitic diseases. There are lung worms, stomach worms, and intestinal worms of various species, each variety of which may cause outbreaks of diseases, debilitating and stopping the growth of the animals and causing the death of many of them.

Other species of our domesticated animals are often seriously affected by animal parasites, and many mysterious cases of disease are due to their effects. Some of these parasites are even dangerous to the health and lives of the people who consume the meat of affected animals. Everyone has heard of the trichina which is so common in the flesh of hogs and which has brought so many restrictions upon our foreign trade in pork products. It goes without saying that parasites which not only menace the health and lives of our domesticated animals, which threaten the health of the consumer of meats, and which endanger the commercial relations of great nations, are worthy of careful and thorough study. Such a study is being made in the Zoological Laboratory of this Bureau, where there is now the best collection of such parasites that is to be found in the world.

Investigations are being made to learn the exact nature of each parasite, how animals become infected, how and where the parasites multiply, and how they are to be treated.

THE DAIRY WORK.

The importance of the dairy industry has long deserved the recognition of the Department, but it is only recently that a Dairy Division has been organized in this Bureau. Its efforts have been largely confined to the collection of information, the publication and distribution of bulletins upon dairy topics, and the encouragement of dairy organizations by attending their meetings and giving legitimate assistance. The milk supply and service of large cities has been made a special subject of investigation, with the object of assisting in the improvement of the quality of the milk and its condition upon delivery to the consumers.

The depressed condition of the exports of dairy products for a number of years emphasizes the desirability of active measures to assist and encourage this branch of the foreign trade. With a view to this, a number of experimental shipments of carefully-selected butter from creameries in the great butter-producing sections of the country were made during the last year. These have furnished much information concerning the difficulties that are encountered by the trade and as to the requirements of foreign markets. They have also convinced English merchants of reputation and influence of the high quality of butter obtainable in this country, and of the practicability of placing it in British markets without appreciable deterioration. It is proposed during 1898 to repeat these trial shipments and to extend them to a wider field.

PRESENT ORGANIZATION OF THE BUREAU.

In 1891 it was found that the growth and extension of the work of the Bureau made it desirable that it should be reorganized into a number of distinct divisions, in order that it might be better system-

atized and directed. There have been formed up to the present time the following divisions:

(1) The Inspection Division, to which is assigned work of an executive nature, including the eradication of contagious diseases, the inspection of export and import animals, meat inspection, vessel inspection, and the regulation of the movement of Southern cattle (to prevent the spread of Texas fever).

(2) The Pathological Division, which is principally engaged in investigating the diseases among domesticated animals to determine their nature, cause, and treatment, together with the most practical method of prevention.

(3) The Biochemic Division, to which is assigned the chemical problems arising during the investigation of disease and the preparation of tuberculin, mallein, and the various serums for the prevention and cure of disease.

(4) The Zoological Laboratory, to which is assigned the study of the parasites affecting our domesticated animals and the diseases which they induce.

(5) The Dairy Division, which collects and disseminates information relating to the dairy industry in the United States.

(6) The Miscellaneous Division, which has supervision over the accounts and expenditures, conducts the general correspondence in regard to diseases and the animal industry of the country, and directs the field investigations.

(7) The experimental station, where the animals used in the experiments are kept, where small animals for these purposes are bred, and where antitoxic serums for animal diseases are prepared.

All of this machinery of the Bureau is working in one way or another to stop the losses and to increase the receipts of the stock raisers of the United States. To understand the different lines of this work, the objects in view, and what is being accomplished, it is desirable to take up one problem at a time.

THE BENEFITS DERIVED FROM THE BUREAU WORK.

In what has preceded, an effort has been made to give a general idea of the work of the Bureau of Animal Industry, the objects in view, and some of the more important results. Many minor points have been omitted, and much valuable service that is being rendered has not been mentioned. It may be stated in a general way that the policy of the Bureau has always been to render direct returns to the country of a value greater than the appropriations which it consumes. It has never been willing to spend money without being able to show commensurate results.

The eradication of pleuro-pneumonia stopped the ravages of that disease, and saved just that much to the cattle industry. The regulation of vessels reduced the losses at sea, and saves from \$2,000,000 to

\$3,000,000 annually in insurance of export cattle. The Texas fever regulations yearly prevent at least \$500,000 in losses from that disease. The manufacture of tuberculin saves State authorities not less than \$15,000 a year, and gives them a more reliable article than they formerly obtained by importation from abroad. The distribution of blackleg vaccine is already saving \$100,000 worth of cattle a year, according to the reports of the owners.

In other words, the executive work for the eradication and control of diseases and the supervision of export animals has yielded, and will continue to yield, direct results that save our farmers many times the cost of the Bureau work. The scientific laboratory and experiment station are furnishing tuberculin, mallein, blackleg vaccine, and hog cholera serum worth much more than the cost of the scientific work. And, finally, the Dairy Division, by extending the markets for American butter, will bring returns that will fully justify its existence and the expenditures which it is making.

Although these few lines of work have yielded such satisfactory returns, the benefit of the meat inspection and that of the inspection of export and import cattle has been even greater in maintaining our export trade and establishing the reputation of our meats. The money value of this work is incalculable, as is that of the scientific investigation of diseases. The serum treatment for hog cholera, for example, will make it possible to save many millions of dollars annually. The object at present is to show, however, that the Bureau is yielding direct and definite returns far beyond its cost.

These statements are made because the appropriations to the Bureau have been comparatively large, and there has not always been a clear understanding of the nature and results of its work. It is incontestable that this is one bureau of the Government which has yielded to the country a constant profit, and which still has opportunities before it that warrant a further extension of its field of work.

SOME ESSENTIALS IN BEEF PRODUCTION.¹

By C. F. CURTISS, M. S. A.,

Director of the Iowa Agricultural Experiment Station and Professor of Agriculture in the Iowa Agricultural College.

A brief consideration of the qualities of practical excellence in beef cattle may well engage the attention of the breeder and feeder. A topic of this character is too often regarded as of interest only to the professional exhibitor or the lecture room instructor and student. But every successful breeder must always be a student, for the first essential in successful breeding is a clear conception of what constitutes a good animal and of all the characteristics that go to make up real excellence in a herd. It is said that the late renowned Amos Cruickshank, the founder of the great Scotch tribe of Shorthorns, was often seen by the side of the leading sale rings of Great Britain intently studying every animal that came into the ring, and his minute knowledge of all the animals shown was the marvel of those who chanced to converse with him about them afterwards. While the methods of the justly celebrated Robert Bakewell, the first great improver of live stock, were largely secret, it is known that he was not only an exceedingly close student of living forms, but that his rooms were also full of models and parts of domestic animals that he had carefully dissected and preserved for future reference. In his work of selection and improvement he imparted to the Leicester sheep such a remarkable aptitude to take on flesh that this quality remains, even to the present day, a characteristic of the breed to a greater degree than of any other long-wooled breeds of England.

This aptitude to take on flesh is of vital importance to the beef producer as well as to the breeder of show-ring and sale stock. The show-ring type must necessarily keep close to and be largely governed by the practical demands imposed by the feed yard and the block, else the lessons of the show yard and sale ring are without value, if not positively misleading. No one is more concerned in what constitutes the essential qualities of a good beef animal than the man who breeds and feeds for the block and attempts to meet the conditions imposed by the market; for it must be kept in mind that this is the

¹This article is also published as Farmers' Bulletin No. 71, and may be obtained free by addressing a request to the Secretary of Agriculture, Washington, D. C.

ultimate end of all beef stock, and the best beef animal is the one that carries to the block the highest excellence and the most profit. This, in a word, is the keynote of the whole problem.

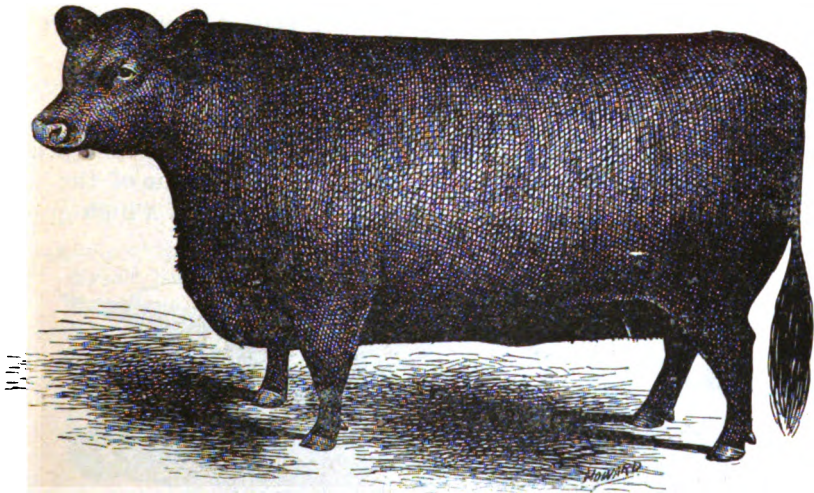


FIG. 1.—Champion Angus heifer, Smithfield (England) Fat Stock Show.

THE BEEF TYPE.

There is at the outset a well-defined beef type that admits of less flexibility than is generally supposed. We hear much about the dairy

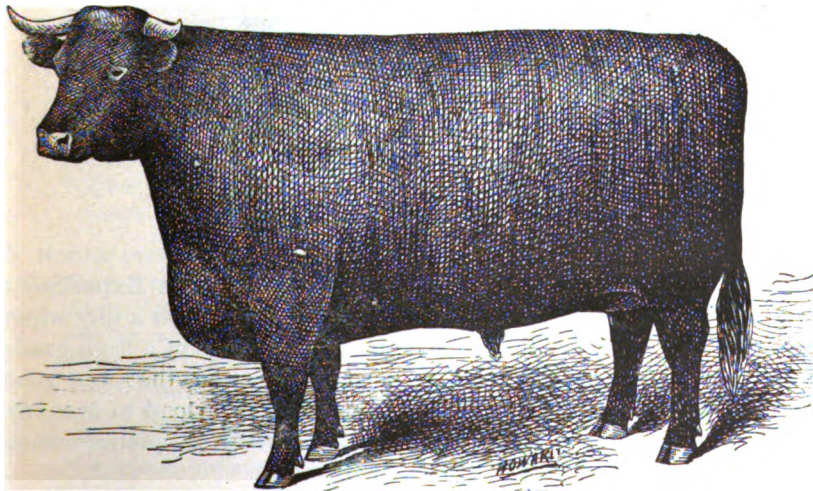


FIG. 2.—High-grade Shorthorn steer.

type—and there is a dairy type, fairly clean cut and well defined—but there is also a beef type, more clearly defined and less variable than the dairy type. Common observation and experience confirm this

assertion. There are not a few cows of quite positive beef tendencies capable of making very creditable dairy records, and a great many that combine milk and beef to a profitable degree, but a good carcass of beef from a steer of a pronounced dairy type or breed is rarely seen. So clearly and definitely is this beef type established that to depart from it means to sacrifice beef excellence.

The accompanying illustrations (figs. 1, 2, and 3) pretty accurately represent the ideal beef type.

The first is a good reproduction from a photograph of a prize-winning Angus heifer exhibited by Queen Victoria at one of the late Smithfield Fat Stock Shows. The next is a portrait of a high-grade

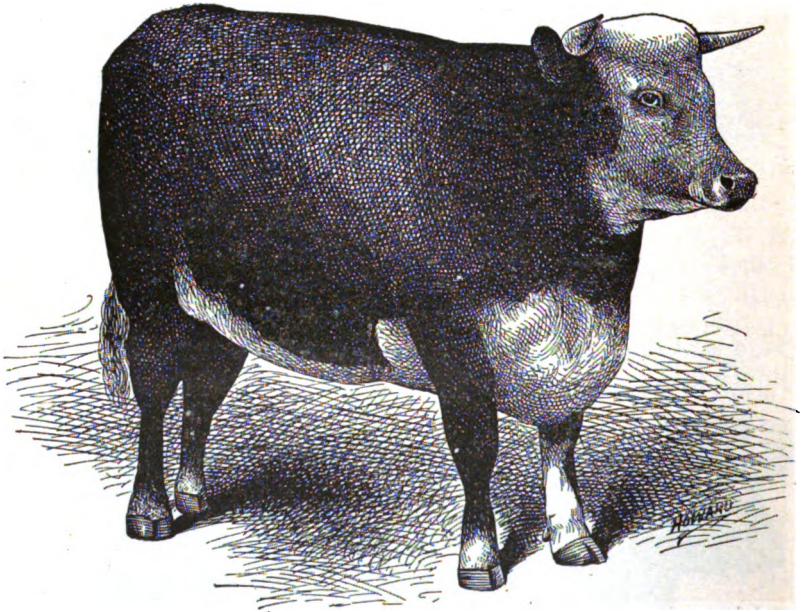


FIG. 3.—High-grade Hereford steer.

Shorthorn steer, raised as a skim-milk calf at the Iowa Experiment Station. He was the best steer in the Chicago yards on a day when there were 26,000 cattle on the market. The third is of a high-grade Hereford steer, fed at the Iowa Experiment Station, that was good enough to easily top the market, and was one of a carload to dress an average of 67.5 per cent of net beef. He weighed 1,620 pounds when 2 years old.

These animals, though representing different breeds, present that compactness of form, thickness, and substance, together with superior finish and quality, coupled with an inherent aptitude to lay on flesh thickly and early, that always characterizes the beef animal of outstanding merit.

These points are more specifically itemized in the following score card prepared for the use of students at the Iowa Agricultural College:

Scale of points.

A. GENERAL APPEARANCE (25):	Possible score.
<i>Weight</i> —Estimated lbs.; actual	
<i>Form and size</i> , smooth, even, parallel lines, deep, broad, low set	10
<i>Quality</i> , thick covering of firm flesh, mellow touch, soft heavy coat. fine bone, velvet-like skin	10
<i>Style</i> , vigorous, strong character, active, but not restless	5
* <i>Objections</i> , rough or angular in form, harsh coat, hard skin, dull appearance	
B. HEAD AND NECK (10):	
<i>Muzzle</i> , broad; mouth large, jaws strong, nostrils large	2
<i>Eyes</i> , large, clear, placid	2
<i>Face</i> , short, quiet expression	1
<i>Forehead</i> , broad, full	1
<i>Ears</i> , medium size, fine texture	2
<i>Neck</i> , thick, short and full, throat clean	2
<i>Horns</i> , fine texture, medium size or small	
* <i>Objections</i> , long or lean head and neck, dull eyes, coarse, heavy horns.	
C. FOREQUARTERS (10):	
<i>Shoulder</i> , covered with flesh, compact on top, smooth	4
<i>Brisket</i> , prominent and wide	3
<i>Devlap</i> , full, skin not too loose and drooping	1
<i>Legs</i> , straight, short; arm full, shank fine, smooth	2
* <i>Objections</i> , bare shoulders, narrow on top, contracted brisket, coarse legs	
D. BODY (35):	
<i>Chest</i> , full, deep, wide; girth large; crops full	8
<i>Ribs</i> , long, arched, well covered with firm flesh	7
<i>Back</i> , broad, straight, smooth, and even	10
<i>Loin</i> , thick, broad, full	6
<i>Flank</i> , full, even with underline, or nearly so	4
* <i>Objections</i> , narrow or sunken chest, hollow crops, sloping ribs, bare or rough back and loin, high flank	
E. HINDQUARTERS (20):	
<i>Hips</i> , wide, smooth, well covered	5
<i>Rump</i> , long, even, wide, smooth, not patchy	4
<i>Pin bones</i> , wide apart, smooth, not patchy	2
<i>Thighs</i> , full, deep, and wide	2
<i>Twist</i> , full, deep, large, level with flank, or nearly so	3
<i>Purse</i> , full, indicating fleshiness	2
<i>Legs</i> , straight, short, shank fine, smooth	2
* <i>Objections</i> , prominent rough hips, narrow or bare rump, spare thighs. light twist, small purse, coarse legs	
Total	100

* The score card as used in the classes contained an additional column for marking the student's estimate of deficient points.

THE USE OF THE SCORE CARD.

The score card is an educator and of great advantage to the student, but its use is not generally favored in the show ring by leading judges. The judge who goes into the show ring, like the expert buyer in the great markets, should carry a well-defined mental conception of a good animal and be able to detect at once the qualities that are objectionable. This applied to the animals of a ring virtually amounts to the use of a score card without the objectionable features of that system. In recommending the score card to the student, the term student is used in its broadest sense, embracing not only the

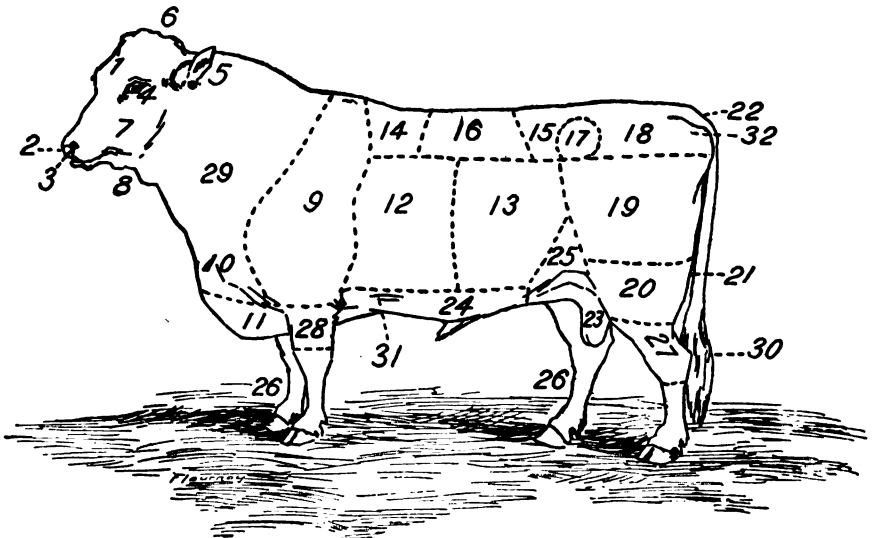


FIG. 4.—Names of points.

- | | | | |
|-----------------------|----------------|-------------------|--------------------|
| 1. Forehead and face. | 9. Shoulders. | 17. Hooks. | 25. Flanks. |
| 2. Muzzle. | 10. Chest. | 18. Rumps. | 26. Legs and bone. |
| 3. Nostrils. | 11. Brisket. | 19. Hindquarters. | 27. Hocks. |
| 4. Eyes. | 12. Fore ribs. | 20. Thighs. | 28. Forearms. |
| 5. Ears. | 13. Back ribs. | 21. Twist. | 29. Neck vein. |
| 6. Poll. | 14. Crops. | 22. Base of tail. | 30. Bush of tail. |
| 7. Jaws. | 15. Loins. | 23. Cod purse. | 31. Heart girth. |
| 8. Throat. | 16. Back. | 24. Underline. | 32. Pin bones. |

prospective breeder within the class room, but every member of the great practical school as well who wishes to keep in the foremost rank of his profession. One of the prime causes why so many men fail in this field is the lack of a thorough study of the essential characteristics. In other words, and to put it more plainly, breeders fail to breed good animals because they do not know what good animals are. A clear and accurate understanding of what constitutes genuine excellence is absolutely essential to the attainment of that excellence.

It is not necessary here to take up in detail all the points enumerated in the foregoing score card, but it is proper to discuss briefly the

controlling principles and logical reasons that govern the formation of a standard of excellence of this nature. The analytical method of resolving every problem into scientific formulas and principles, based on the firm foundation of unquestionable truth, is the intelligent method of study and investigation, and this method ought more generally to prevail in agriculture.

BEEF CHARACTERISTICS BRIEFLY DEFINED.

The first thing that should be looked to is the general beef form—low, broad, deep, smooth, and even, with parallel lines. No wedge-shape or sharp, protruding spinal column is wanted for the block. Next in importance is a thick, even covering of the right kind of meat in the parts that give high-priced cuts. This is a very important factor in beef cattle that is often overlooked. The accompanying illustration (fig. 5) represents the wholesale method of cutting beef, showing the relative importance and value of the different parts. In a test made in Chicago on 6 representative beef animals—2 Shorthorns, 2 Angus, and 2 Herefords—fed and marketed by the Iowa Experiment Station, the cuts designated as “rib” and “loin” averaged 27.8 per cent of the aggregate weight of the carcass and sold for 63.9 per cent of the total value. By this

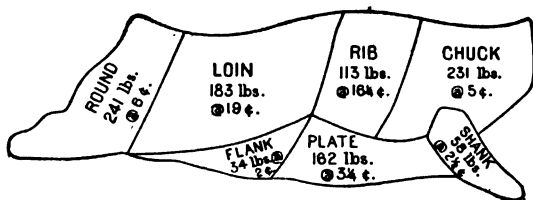


FIG. 5.—Chicago wholesale dealers' method of cutting beef.

method the chuck, or shoulder, and rib cuts are divided between the fifth and sixth ribs, and in doing so the knife is run close up to the shoulder blade. The rib and loin cuts are divided between the twelfth and thirteenth ribs, and the loin is separated from the “round” at the point of the hip. In cutting for the retail trade the “rib roast” is taken from the cut designated “rib,” and the “porterhouse” and “sirloin” cuts are taken from the loin cut. Tenderloin steak is taken from the inside and just beneath the ribs on either side of the spinal column, and the commercial beef tenderloin always comes from inferior stock, mainly from “canners.” That class of cattle has no other meat that is desirable for the block, and the tenderloin strips may be pulled out and put on the market, while the remainder goes into the boiling vats for canned or pressed beef. To take tenderloin steak from good carcasses would destroy the value of the “porterhouse” cuts. This the dealer never does. The other retail cuts and their relative values are shown in the second diagram (fig. 6). The third illustration (fig. 7) represents the retail method of English butchers.

The Chicago and New York markets discriminate more sharply and present a wider variation in the relative price of the prime and coarser

cuts than any other markets of the world. By reference to the wholesale method of cutting beef used by Swift & Co., and the actual wholesale selling prices of the several cuts taken from a bunch of cattle sold this firm by the Iowa Experiment Station, it will be seen that the rib and loin cuts command over four times the average price paid for the remainder of the carcass, and it is apparent that the practical beef animal must be good in these parts. Broad, well-covered backs and

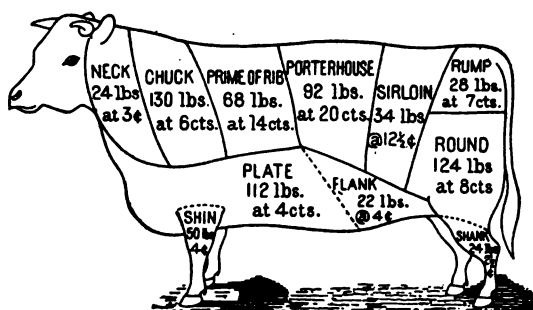


FIG. 6.—Chicago retail dealers' method of cutting beef.

and ribs are absolutely necessary to a good carcass of beef, and no other excellencies, however great, will compensate for the lack of this essential. It is necessary to both breed and feed for thickness in these parts. And mere thickness and substance here are not all. Animals that are

soft and patchy, or hard and rolled on the back, are sure to give defective and objectionable carcasses, even though they are thick, and they also cut up with correspondingly greater waste. A marked and important change has taken place in the profitable type of cattle within comparatively recent years. This change is strikingly illustrated in the development of the Shorthorn. By the courtesy of that veteran feeder and most excellent authority on live stock, the late William Watson, it is possible to furnish a good illustration (fig. 8) of the popular type of beef animal about the beginning of the present century. At that time Culley said, in one of his contributions on live stock, that the "unimproved" breeds of Teesdale were a

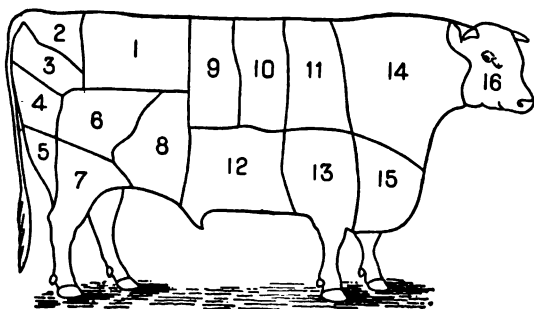


FIG. 7.—English method of cutting beef.

"disagreeable kind of cattle, that, though fed ever so long, never produced any fat, either within or without." Youatt, another celebrated author, described them as "generally of great size, thin-skinned, sleek-haired, bad in handling, coarse in offal, and of delicate constitution." With this as a foundation stock, it is not so difficult to understand how an animal of the Newbus ox stamp might be classed

as belonging to the improved order. This ox was sired by a grandson of Charles Colling's celebrated bull "Old Favourite," and the dam was supposed to be a Scotch Highland cow. The early Shorthorns were large and massive. The famous Durham ox weighed nearly 3,800 pounds when 10 years old. The demand for early maturity and plump, sappy carcasses of medium weight and minimum offal and waste had not then set in. It was not until within recent years that the heavy, inordinately fat, or rough and patchy bullock, became unpopular to such an extent as practically to drive this class from the market and to banish the type from the breeding herds. It is well that this was done; for the modern type, represented by the first three illustrations, makes beef at decidedly more profit and economy to both the producer and the butcher and furnishes the consumer a far superior article.

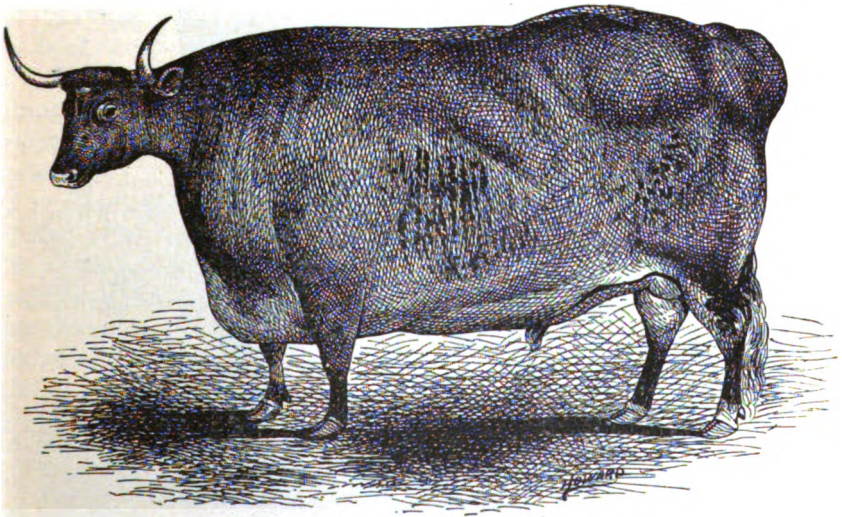


FIG. 8.—Newbus ox.

The parts furnishing the high-priced cuts must be thickly and evenly covered with firm yet mellow flesh of uniform good quality and alike free from hard rolls and blubbery patches. Coarse, harsh, and gaudy animals will no longer be tolerated, much less those that are bony and bare of flesh on the back and ribs. The men who buy our cattle and fix their market value are shrewd enough to know almost at a glance how much and just what kind of meat a steer or carload of steers will cut out, and if the producer overlooks any of the essential points he is compelled to bear the loss.

Then, in addition to securing the general beef form and make-up, together with good backs, ribs, and loins, there is a certain quality, character, style, and finish that constitute an important factor in determining the value of beef cattle. One of the first indications of this is to be found in the skin and coat. A good feeding animal should

have a soft, mellow touch and a soft but thick and heavy coat. A harsh, unyielding skin is an indication of a sluggish circulation and low digestive powers. The character and finish exemplified by a clear, prominent yet placid eye, clean-cut features, fine horn, and clean, firm bone, all go to indicate good feeding quality and a capacity to take on a finish of the highest excellence, and consequently to command top prices. Coarse-boned, rough animals are almost invariably slow feeders and hard to finish properly. A certain amount of size is necessary, but it should be obtained without coarseness. The present demand exacts quality and finish rather than size.

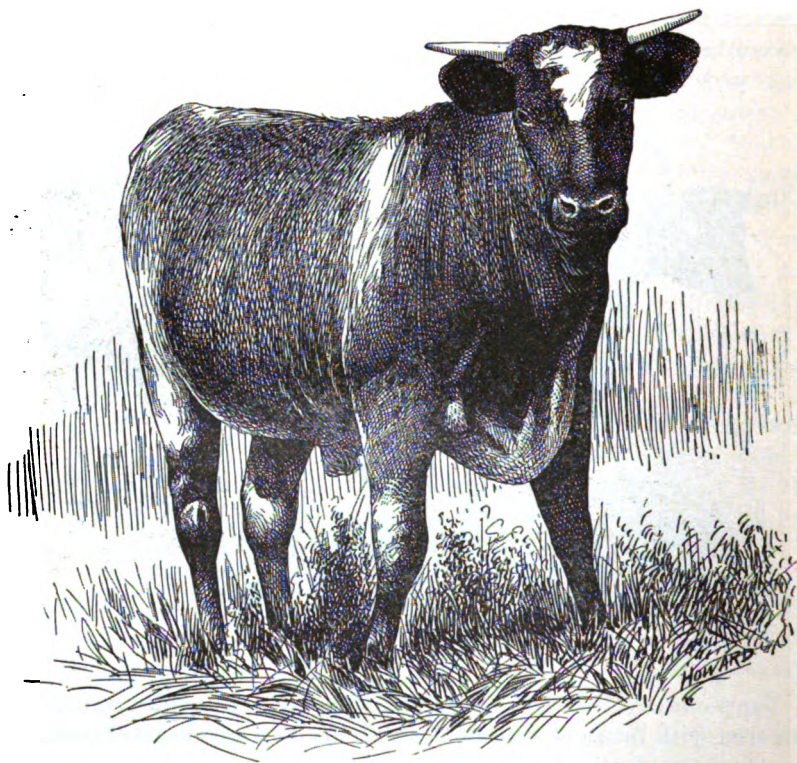


FIG. 9.—A good head and front.

Besides these qualities, and above all, it is necessary to have vigor and constitution. We find evidence of these in a wide forehead, a prominent brisket, broad chest, well-sprung ribs, full heart girth, and general robust appearance; and without these other excellence will not have its highest significance.

SELECTION OF STORE, OR STOCK, CATTLE FOR FEEDING.

Practical and experienced feeders, who breed and purchase steers for fattening, observe striking differences in the aptitude of animals of varying types and make-up to lay on flesh readily and in such

form and quality as to command the highest price on the market. It requires a well-trained eye to detect in all cases the possible variation of results in the store or stock steer; but there are some distinctions that are easily detected. There are certain types of cattle, for instance, that never feed profitably under any conditions, and it is quite as important to discriminate against these in the feed lot as to be able to recognize the excellence in other types. The accompanying illustration (fig. 9) represents a yearling steer that combines practically all of the qualities that go to make up a good feeding steer, while figs. 11 and 12 represent the opposite type. The latter are illustrations of dairy-bred steers, but there is equally as good reason for discarding any native or unimproved steer that presents a similar angular outline, spare form, and rough exterior. The dairy breeds illustrated here are eminently adapted to the purpose of special dairying, but it is a mistake and positive evil to claim for them any beef excellence whatever, as the kind of beef they are capable of producing will almost invariably cost the producer more than its value on the market.

The characteristics that make the profitable feeder are naturally more difficult to detect in animals in stock condition than when fattened, but notwithstanding this there are a number of indications that are fairly reliable. Though the young steer may be comparatively thin in flesh and temporarily lacking the thick, even covering of the back and ribs so essential in the finished carcass, he



FIG. 10.—A good feeder in stock condition—front view.

must nevertheless present that blocky frame and stoutness of build, accompanied by short, straight legs, wide back and loin, well-sprung ribs, fullness back of shoulders and in flanks, prominent brisket, full neck vein, wide chest, and well-rounded barrel, together with a good, soft, mellow handling skin and fine, silky hair, giving what is termed the thick, mossy coat, without coarseness, and with it all a good, strong, vigorous head, clear, full eye, and quiet temperament. The importance of an even covering of flesh and good handling quality can hardly be overestimated. The bone should be moderately fine and clean. Coarseness either in the bone or about the head and horns is particularly objectionable, as it indicates coarseness of texture throughout and a greater percentage of offal and cheap meat, as well as a tendency to sluggish circulation. The head should present a certain refinement, finish, and vigor that in a measure indicate general quality and superior excellence of finished product, though this refinement

must not be accompanied by delicacy. The illustrations (figs. 10 and 10a) of a good feeding type in stock condition are taken from photographs of one of a carload of skim-milk calves in a feeding experiment at the Iowa Experiment Station.¹ This calf was about a year old when these photographs were taken. This picture furnishes a good illustration of the type that never fails to make a good record in the feed lot and on the block. While it perhaps represents a higher standard of excellence than can generally be obtained in feeding cattle, the

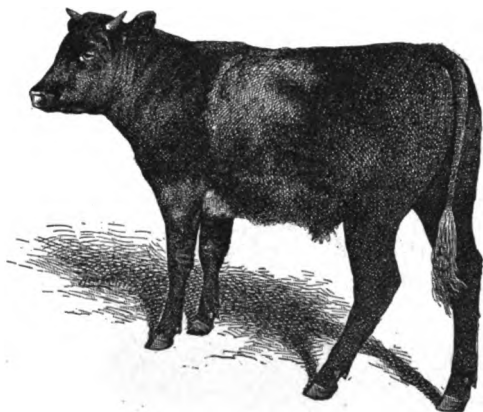


FIG. 10a.—A good feeder in stock condition—rear view.

standard is none too high for the best results, and it should be as closely approximated as practicable.

BREEDING TYPE VERSUS THE BLOCK.

Notwithstanding the importance of those things which go to make up a finished carcass of beef of the highest value, and while the block is the ultimate end of all beef cattle, it should be kept in mind that undeveloped breed-

ing stock can not at all times be expected to measure up to this standard. Every fair or live-stock exhibition should have its fat-stock classes, and these should be taken as the standard of the finished product. They will afford the most practical and useful lessons to be gained by the show, and the stock brought out for them will represent the culmination of the highest excellence that can be attained. The competition will be a measure of everything at its best, and in it every animal will rightly be rated according to what it is capable of producing on the block. The show ring should afford a contest of that kind, and in addition to the practical lessons and its educational value it would at least partially remedy the tendency to rate breeding stock according to the flesh carried. While heavy flesh is necessarily a factor of great importance, yet to go into a breeding herd and absolutely rate every animal as if it were to go at once to the shambles may lead to entirely erroneous results. Fitting should not be undervalued. Other things being equal, the best fitted should always win; but an animal in a breeding herd ought to be rated according to its value as a representative of that herd, and for the purpose of the herd, instead of taking rank simply as a carcass of beef in the form presented. Breeding and feeding quality should not be subordinated to mere wealth of flesh. In a fat-stock ring it is

¹Bulletin No. 35, Iowa Experiment Station.

proper that only the carcass be considered. In a breeding ring an animal should be rated by its value to go on in the herd and not simply to go onto the block. There is a well-marked distinction here that should never be overlooked. The fat-stock classes should be added to stock-show classifications for the lessons they will bring and to avoid diverting the purpose of the breeding-stock classes.

**EXCELLENCE FOR THE BLOCK DUE TO INHERITED QUALITY RATHER
THAN FEED OR GAIN.**

The misleading practice of rating beef animals mainly by the gains made in the feed yard is altogether too common. The distinction

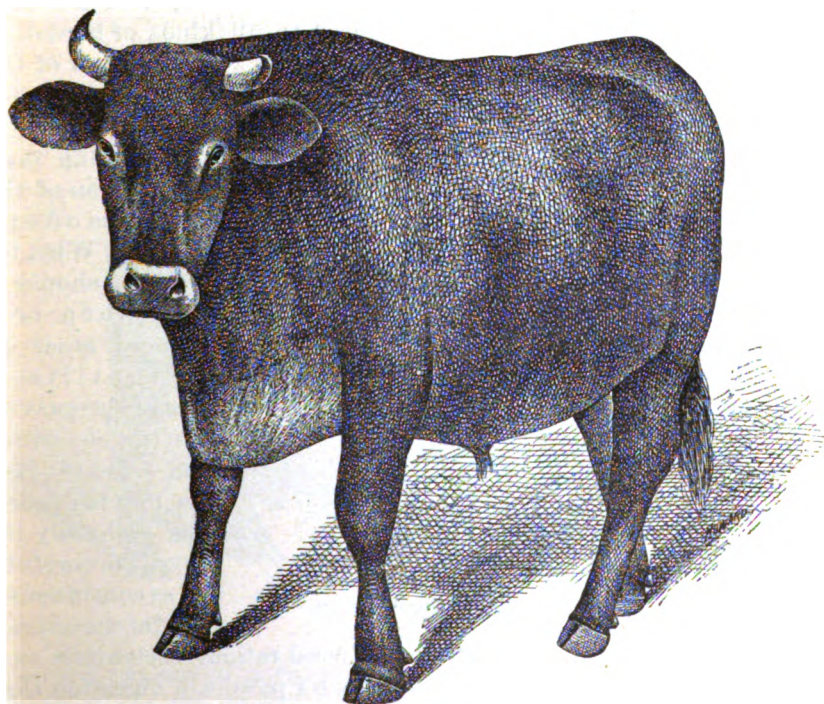


FIG. 11.—An unprofitable feeding type.

between cattle of different types is absolutely essential to profitable feeding. There is not a very great difference in the rate of gain or the number of pounds of increase in weight from a given amount of feed that will be made by a representative of the best beef breeds, or by a genuine scrub, a Jersey, or a Holstein steer. This statement may seem somewhat at variance with prevailing opinion concerning the potency and superiority of improved blood. Practical breeders and improvers of live stock have been rather reluctant to recognize this doctrine, and a good many will not concede it yet; but the evidence is constantly accumulating, and the principle has been repeatedly demonstrated. It is useless to ignore facts.

After all there is no well-founded reason why a Shorthorn, an Angus, or a Hereford should make more gain in weight from a bushel of corn than a native, or scrub. This is governed altogether by the digestive and assimilative machinery of the steer. The Holsteins, for instance, are well known to be hardy and extremely vigorous eaters. They consume large quantities of feed and render good returns for their rations. Also the despised scrub has a ravenous appetite and is almost as omnivorous as a goat. It is not reasonable to expect that the improved breeds, notwithstanding their superiority in other respects, have inherited any greater constitutional vigor or more perfect working organs of digestion than those animals belonging to the class designated as natives, or scrubs, which, from the nature of their surroundings and the very law of their existence, have been inured to all kinds of hardship.



FIG. 12.—A bad back and unprofitable feeding type.

Nature's law of the survival of the fittest was more rigid and exacting than the selection of the average modern breeder. Why, for instance, should a Shorthorn or a Hereford steer be able to utilize a greater proportion of a given ration than a Holstein? Has not the latter been as highly improved, as carefully and as continuously bred for the express

purpose of making good return for a liberal ration? Scientists have discovered that civilized man has no greater powers of digestion than the barbarian or the Indian. Neither has the improved steer materially better digestion than the native. The feeder is often deceived in the belief that he has a good bunch of cattle simply because they feed well and gain rapidly. Economy of production is an important factor, but it is by no means all. It is even more important to have a finished product that the market wants and will pay for than it is that it should simply be produced cheaply.

The illustration (fig. 11) represents a high-grade Jersey steer, fed and marketed by the Iowa Agricultural Experiment Station. This steer was fattened and finished for market under conditions quite similar to those of the Shorthorn and Hereford steers illustrated on pages 49 and 50, and the rations were practically the same.

THE TYPES COMPARED.

In making a comparison, only the Hereford will be used, but the distinctions are equally applicable to either. While in the feed lot the Jersey made a gain of 2 pounds a day for nine months and the Hereford 2.03 pounds a day for fourteen months. There was practically no difference in the rate and cost of gain. Judged by the record they made up to the time they went to market, the Jersey would take rank close to the Hereford in both rate and economy of gain. But the interesting part of the comparison came later. The Jersey took on flesh rapidly and was exceedingly fat and well finished. He was as good as it is possible to make a Jersey steer. Yet when he went to market he had to sell \$2.12½ below the top quotations, while the

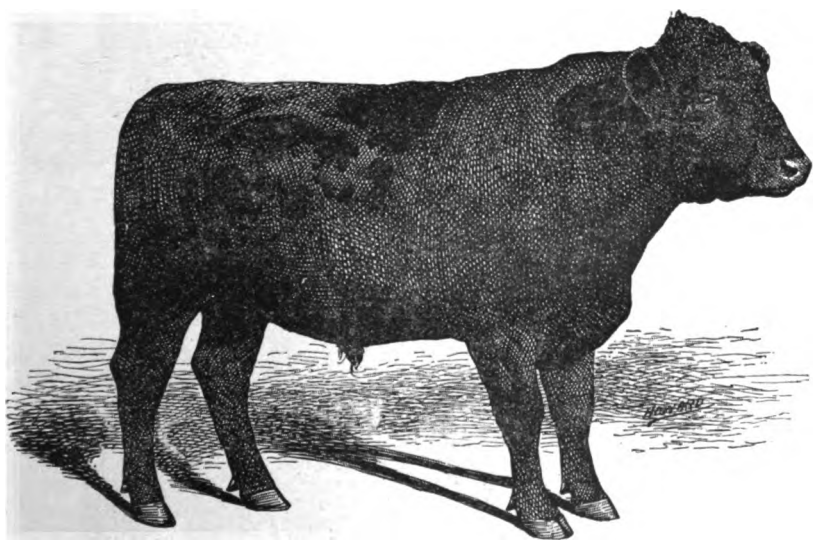


FIG. 13.—A good back.

Hereford was one of a carload to sell 10 cents above the top for any other cattle on the market. It is sometimes claimed that this distinction is partly due to prejudice, but since I have for several years followed the cattle through the feed lot and to market and onto the block, carefully ascertaining all the facts, I am convinced that the expert buyers who fix the price for beef cattle in the great market centers rate them strictly on their merits, entirely independent of any breed or type consideration. The controlling factor is the utility and inherent value of the animal for the practical test of the butcher. The slaughter and block test clearly revealed the reasons for this marked distinction in the selling value of these two steers.

The Jersey belongs to a breed that has been developed for centuries for the specific purpose of making butter; that is, putting the product

of its feed into the milk pail. They are rough, angular, and bony, and when fattened they do not put the fat into the tissues of the high-

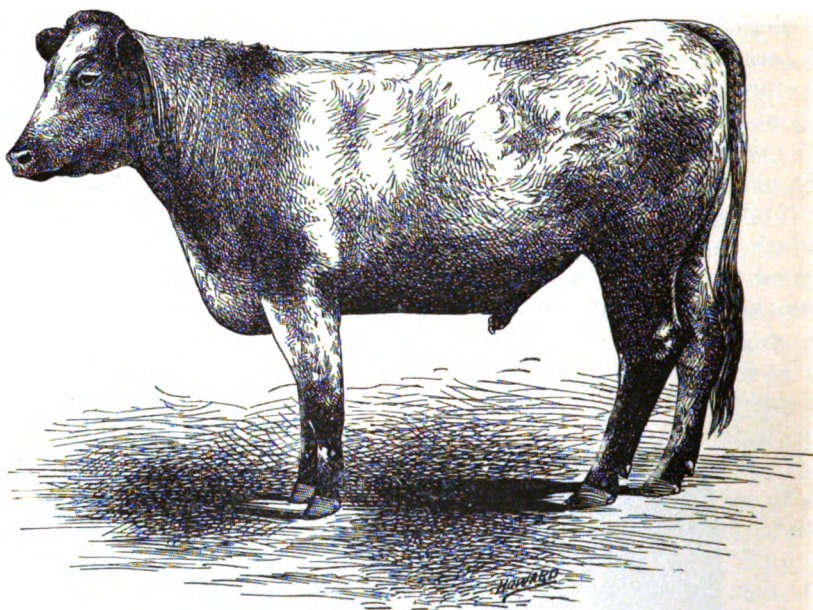


FIG. 14.—A good feeder.¹

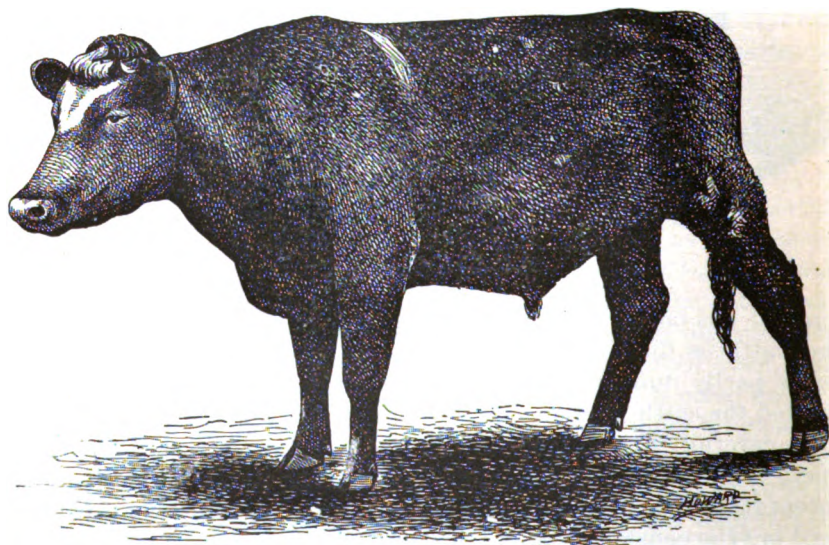


FIG. 15.—A bad feeder.¹

priced cuts of steaks and roasts on their backs, as representatives of the beef breeds do; e. g., this steer had 190 pounds of what is termed loose, or internal, tallow and 55 pounds of suet on a 763-pound carcass.

¹ Both pure-bred Shorthorns fed at the Kansas Experiment Station. Bulletin 51, 1895.

That is, 32.1 per cent of the steer's carcass was tallow. Tallow was at that time worth 4 cents a pound, while the best loin cuts were worth 19 cents at wholesale. And besides that, this steer only dressed 57.5 per cent of beef, while the Hereford dressed 67.5 per cent. Then, the Hereford had only 95 pounds of tallow and 38 pounds of suet on an 888-pound carcass, equivalent to 15 per cent. And besides this striking difference in the percentage of meat in the high-priced cuts, the meat of the Jersey was much inferior to that of the Hereford. The Jersey steer went on accumulating fat around his paunch and internal organs to the extent of nearly one-third of his entire body weight, while he did not have meat enough on his back to decently cover his bones. This explains why a Jersey or a Holstein or any other animal

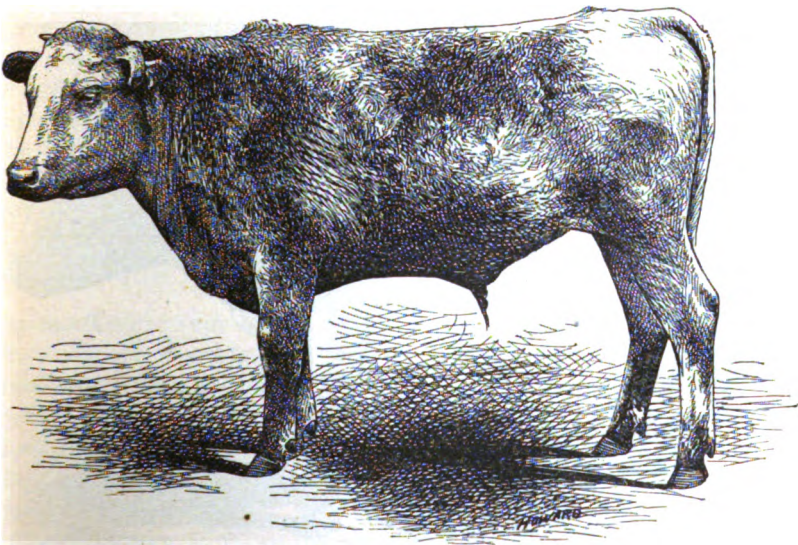


FIG. 16.—A bad feeder.¹

not expressly bred for beef can never be made plump and smooth, no matter how long it is fed or how highly it may be fattened.

The two illustrations on pages 59 and 60 (figs. 11 and 12) present additional evidence of this essential in the profitable beef type.

One of the steers shown is a pure-bred Holstein and the other a pure-bred Galloway. At the time the photographs were taken both had been on feed at the Iowa Agricultural Experiment Station under uniform conditions for six months. The gains made were substantially the same, and the feed eaten varied scarcely any. At this writing these steers have not been marketed, but stock shippers bid \$5 per hundred weight for the Galloway while the best offer for the Holstein is \$3.50. The back of the Holstein steer affords an object lesson

¹Scrub fed at the Kansas Experiment Station. Bulletin 51, 1895.

for the feeder. It presents a model of about all that is not wanted. Its deficiencies are strikingly apparent, and, what is more, a back of that kind never takes on a smooth covering of good flesh under any amount of good feeding. Besides, the scanty flesh that is there will be found of inferior quality owing to the absence of that fat deposited throughout the tissues of the meat that is necessary to a ripe, juicy, and highly flavored cut. This is the fundamental and essential reason why rough cattle do not sell. These same distinctions are largely true of the native and all other unimproved cattle when an attempt is made to fatten them for beef. The men who buy them are well aware of these distinctions and they fix their market values accordingly.

It is of vital importance, then, that the feeder should have the

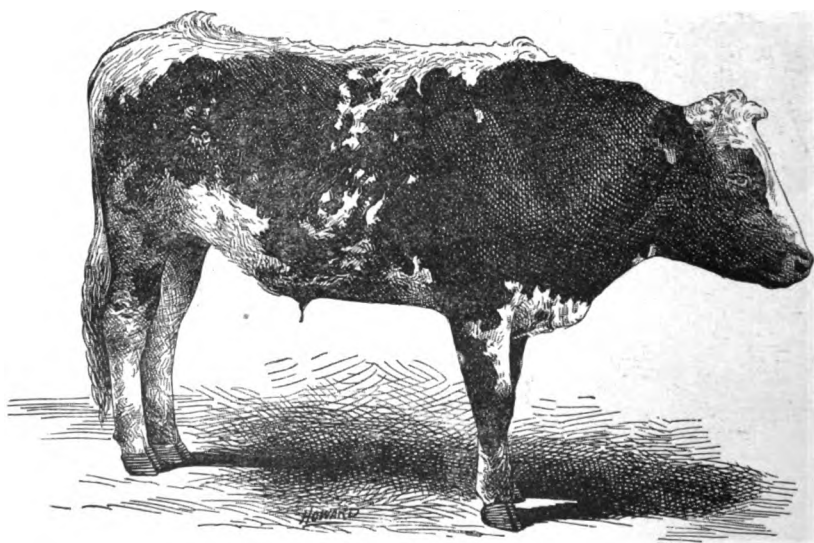


FIG. 17.—A bad feeder.¹

right kind of cattle for fattening. The Jersey and the Hereford steers previously referred to made practically the same gains in the feed lot and at substantially the same cost per pound for feed consumed, but the market comparison revealed the fact that the steer of beef type and inherited beef-making capacity was making a product worth 49 per cent more than the other steer, and this increased value not only applied to the gain made in the feed yard, but to the entire carcass as well. The feeder can not afford to ignore these distinctions. They are of vital concern and determine profit or loss. If the producer were hauling any other product to market instead of feeding it to cattle, he would not hesitate to select the one that would return 49, or 25, or even 10 per cent more than another.

¹ Scrub fed at the Kansas Experiment Station. Bulletin 51, 1895.

EARLY MATURITY.

Another consideration having a practical bearing on the meat-producing industry is the economy of production as influenced by the age of the animal. It is but a few years since the prevailing practice among cattle raisers and feeders was to allow the steer the first three years of its existence in which to attain the standard growth, and supplement this by six months on a heavy grain ration for the fattening process. The two periods were regarded as essentially distinct, and it was firmly believed that they must always remain so. Under these conditions it was also observed that as the fattening process advanced the gains invariably diminished. The last hundred pounds produced on a bullock not infrequently cost per pound three times the live-weight value per pound of the animal on the market. This was the day of heavy weights, and they had to be produced at all hazards and regardless of expense. In January, 1893, the Iowa Agricultural Experiment Station marketed cattle at 1,500 pounds that were rased $37\frac{1}{2}$ cents per cwt. below 1,700-pound cattle of the same quality. The buyers stated that they were equally as good in every respect except that they lacked the size required to furnish the cuts demanded by the trade.

THE PASSING OF THE HEAVY-WEIGHT CARCASS.

A marked change has taken place within more recent years, however. These years have witnessed the passing of the large, overfatted steer and the supremacy of the well-fattened, medium-weight carcass, yielding better returns in the feed lot and more profit on the block, and it is probable that the old sort heavy weights will never again outsell the compact tidy bullock of prime-quality and medium scale.

The existence of these conditions adds a new interest and practical significance to the question of early maturity. The new order of things has placed the advantages and economy to be derived from this source within the reach of the feeder, whereas their attainment was formerly impracticable.

In this connection the following editorial, appearing in the Live Stock Report, April 23, 1897, is particularly applicable:

There seems to be a wide diversity of opinion as to what constitutes a "heavy steer." * * * One man thinks 1,800 pounds not too heavy for even a June market, while another is fearful that his 1,300-pound cattle, unless shipped at once, will be too heavy and have to go at sacrifice figures. Every feeder should keep in touch with his market, watching that market's fluctuations, noting its preferences, and then cater to its demands. It is not always quality that insures a good sale; it is very frequently judicious feeding and shipping. The most successful feeder is the one who, starting with the right class of stock as regards quality and condition, aims to finish them at a time when that particular class is in best demand at market. This can not always be figured down to a nicety, but it can be pretty closely approximated. Feeders who get their cattle in at the most

advantageous time are termed "lucky," but "brainy" would be a more appropriate term.

At this time last year large numbers of excessively fat beesves were being put upon the market, and this condition of affairs continued throughout April and May and on into June. They sold at a fearful sacrifice, and why? Because they were heavier than any demand called for. * * * This winter and spring we have had an exactly opposite condition of affairs. The tendency has all been toward early shipping, and daily and weekly the market has had an oversupply of half-fat cattle. The proportion of 1,400 to 1,500 pound beesves has been remarkably small, and yet this has been throughout the entire season the very best selling class, owing to the excellent export demand and a good inquiry from Eastern buyers as well. * * * There has been no inquiry for cattle weighing over 1,600 pounds. The day of such animals seems past and gone forever. But we have hardly had enough beesves weighing between 1,400 and 1,600 pounds to fill requirements, and feeders who have heeded our advice and fattened their cattle to within those weights have assuredly made money. Those are the "heavy" steers. Over the above weight steers become excessively fat, and buyers discriminate. There is now no demand for cattle weighing over 1,600 pounds, and in fact buyers at the yards say 1,500 pounds is heavy enough for any purpose. There are practically two months, though, when even 1,400 pounds is a little too heavy, and this period is now approaching—May and June. During this time a 1,350-pound steer is heavy enough for any purpose—home slaughter, Eastern shipment, or export alive. Throughout the other ten months of the year cattle weighing upward of 1,400 pounds and not over 1,500 are the most desirable class to handle. The lighter weights are first and best sellers on the British markets during warm weather, and for this reason exporters want that class here, say, between May 15 and July 10. And every shipper to market knows that when exporters are not buying heavy cattle those beesves suffer badly. * * * The feeder should know what his market wants, and when it wants it. The feeder must cater to the market; the market will not cater to the feeder; it is too busy catering to public demand.

THE ECONOMY OF GAIN AT DIFFERENT AGES COMPARED.

It is a well-established principle in animal nutrition that young animals make more economical gains than older ones, and that the amount of feed required for a given gain increases as the age of the animal advances toward maturity.

Comparatively few practical feeders are aware of the marked variation due to the operation of this law. Experiments are recorded where gain has been made at the rate of 1 pound of increase in live weight for each pound of dry matter in the feed consumed.¹ This was made with calves under three weeks of age. The ration consisted of 17.6 pounds of milk per head daily with 3.9 pounds of cream added.

In an experiment conducted by the writer at the Iowa Agricultural Experiment Station² a gain of 1 pound of increase in live weight was obtained from each 1.97 pounds of dry matter in the feed consumed during a period of ninety days, beginning when the calves were about one week old. The ration consisted of separator skimmed milk, supplemented with corn, oats, and oil meal, and in addition a moder-

¹ Armsby's Manual of Cattle Feeding.

² Bulletin No. 25, p. 24.

ate allowance of hay. But, as compared with this, during the first eight months it required 4.6 pounds of feed (dry matter) for a pound of gain, and for the first seventeen months it required 5.97 pounds of feed for a pound of gain, and for a period of two years the amount of feed required for a pound of gain had increased to 7.19 pounds, and during the last four months the amount of feed per pound of gain ran up to 9.02 pounds. In another experiment, recorded in Bulletin No. 24 of the Iowa Station, five steers were finished for market at the age of 32 months, and it required 10.4 pounds of feed for a pound of gain at this age. Director Thorne and Professor Ilickman have presented a summary of results¹ obtained at the stations in eight States, covering 132 head of cattle ranging in age from 2 to 3 years, in which it is shown that it has required on an average 10.24 pounds of feed (dry matter) for a pound of gain, while the work done by Lawes and Gilbert along this line indicates an average of about 11 pounds of feed per pound of gain on cattle approaching maturity.

These results have been repeatedly verified by many other careful experiments, not only with cattle, but with sheep and hogs as well, and the law of diminishing returns for feed consumed as animals advance in age toward maturity is conclusively established, and governs the economy of gain in all practical as well as experimental feeding. This law should be kept constantly in mind by the meat producer. Economy of production is one of the important factors in the practical problem of determining profit, and the advantages are all with the young and growing animal as compared to the one that has practically attained its growth. In comparing the cost of gain made by pure-bred Shropshire lambs and pure-bred Shropshire yearlings at the Iowa Agricultural Experiment Station, it was found that the lambs made gain in weight at the rate of 1 pound from each 7.18 pounds of feed² consumed, at a cost of 2.88 cents per pound for the gain made, while it required 11 pounds of feed to make a pound of gain on the yearlings, and at a cost of 4 cents. All conditions except age were the same.

The market also pays a premium on the younger animal, owing to the fact that it furnishes a more profitable carcass and less waste by reason of the absence of excessive fat.

The policy of the feeder should be to make use of the advantages of early maturity so far as practicable and consistent with existing conditions. It is not in all cases practicable to do so, however, except in a moderate degree. Forcing to an early finish necessarily means more expensive feeding than where longer time is taken and more use is made of cheaper coarse feeds. Where lands are cheap and grazing and coarse fodders abundant, it may even yet be desirable to take more time for finishing animals for the block and thereby secure greater weight with the minimum amount of grain. In the great feeding sec-

¹ Bulletin No. 60, Ohio Station.

² Bulletin No. 33, pp. 536 and 563.

tion within what is known as the "corn belt," however, the conditions are such as to favor the liberal policy of feeding from first to last, and under these conditions early maturity may be attained by a generous use of the ordinary feeding stuffs throughout the entire growing and fattening period, quite as well or even better than by too extensive use of the more concentrated and expensive grain feeds. That is to say, early maturity may be largely accomplished by the liberal use of the cheaper feeds of the farm, combined with a suitable grain ration, which may be quite moderate except in the finishing period. The modern feeder must combine the advantages of economy of production resulting from early maturity, and the excellence and enhanced value of the finished product that can only come from the right kind of stock well handled. This implies good breeding and continuous good feeding. These requirements are no longer merely subservient, but practically imperative.

CONTAGIOUS DISEASES IN EUROPEAN COUNTRIES.

GREAT BRITAIN.

SWINE FEVER IN 1895.

The records of the board of agriculture for Great Britain show that there were forwarded to the chief veterinary officer of that board, during the calendar year 1894, 12,054 sets of viscera for expert examination for swine fever. In 1895 the total number of sets of viscera forwarded to the same officer was 16,434, an increase over 1894 of 4,380 sets. The number of swine slaughtered in 1895 as diseased, or as a result of having been in contact or otherwise exposed to this infection, amounted to 69,931, and 10,917 more were reported as having died of the disease, making a total loss chargeable to swine fever of 80,848.

The disease was reported from 73 of the 96 counties of Great Britain. The losses in Scotland and Wales were not so great, comparatively, as in the rest of the United Kingdom. The number of hogs slaughtered in those countries was less than 5,000.

For several years a disease known by the term verrucose endocarditis was investigated in connection with swine fever. It was to a large extent coexistent with swine fever, and by many supposed to be a condition due to the fever. The search for indications of this disease was made with the 16,434 hearts submitted in 1895, and in 676 of these deposits were found; "and it is a very interesting fact in connection with these deposits that they are almost invariably found upon the valves of the right side of the heart." The examinations did not confirm the opinion that the disease was in any way related to swine fever.

The chief veterinary officer says:

On occasions when the circumstances have afforded a favorable opportunity for making an inquiry into the history of the animals affected with this disease, the veterinary surgeons who have forwarded the specimens have visited the farm or premises and invariably reported that the affected animals have remained in apparently good health until a short time prior to death; that the only deviations from health observed during life have been a certain amount of purple or red discoloration of the skin and a disinclination to feed, and that these symptoms have been immediately followed by all those distressing paroxysms which attend upon cases of angina pectoris, and death has quickly followed. In no instance has the same disease appeared among the other swine which had been kept in the same sty or in association with the diseased pig.

The following table, taken from the annual report of the board of agriculture for 1895, shows the number of cases of swine fever and diseased hearts detected in the post-mortems conducted in London:

Statement of post-mortems of swine in London in 1895.

Month.	Total number of viscera examined.	Total number of swine-fever cases detected.	Total number of diseased hearts.	Number of cases of diseased hearts not associated with swine fever.
January	321	386	37	15
February	700	380	18	7
March	1,001	582	13	5
April	1,199	561	23	13
May	1,509	559	27	4
June	1,638	599	23	10
July	1,525	547	43	23
August	1,530	528	94	59
September	1,562	587	106	55
October	1,743	739	146	71
November	1,490	500	91	54
December	1,616	515	46	21
Total	16,434	6,587	676	337

A committee was appointed in 1895 to study swine fever in all its phases, and directed to report results to the board of agriculture. The inquiries instituted by this committee were extensive. A report was made in which it was asserted that the disease was due to a specific organism, a bacillus, which is capable of producing swine fever if introduced into the system of a healthy pig by feeding with cultures of the organism. This statement was founded upon the results of tests in which healthy swine were fed pure cultures of the bacillus obtained chiefly from the mesenteric glands of pigs affected with the disease. The report states that the bacillus causing swine fever is not sharply distinguished by its form, size, or staining reaction from many other organisms, and hence can not with ease be identified by microscopic examination.

Another committee was appointed in 1896 to carry on inquiries similar to those of the committee in 1895. Besides the information acquired by these two committees, the chief veterinary officer had experience extending over three years. All this is compiled and embodied in the report of the board of agriculture for 1896, and is deemed of such importance that it is reprinted here in full:

SWINE FEVER IN 1896.

After an experience extending over a period of three years, during which time the veterinary officers have made 40,000 post-mortem examinations of the viscera of pigs either affected with or suspected of swine fever, it is now proposed to place on record the results of the inquiries carried out by them, and of the two com-

mittees which were appointed in the years 1895 and 1896 for the purpose of inquiring into the etiology and pathology of swine fever, and of those other diseases of swine which have been commonly regarded in this country as being either diagnostic of swine fever, or in some way due to that disease, namely, pneumonia in the pig, and verrucose endocarditis.

The remarks contained in this report will be confined solely to the knowledge which has been obtained of those diseases which have been found to exist in the pigs of this country, and have come directly under the notice of the board's veterinary officers. It is quite certain that the disease which exists among the swine in America, where it has received the name of hog cholera, is identical with our swine fever, because in the year 1879 some cargoes of pigs affected with hog cholera were landed at Liverpool, when an opportunity was afforded of identifying the lesions of that disease with swine fever.

To offer any observations on the etiology and pathology of the numerous diseases said to be of a contagious nature which are reported to exist among the swine on the Continent of Europe with a view to establish their identity with, or similarity to, swine fever of this country would serve no purpose, and with our imperfect knowledge of even the clinical features of those diseases it would be obviously injudicious to offer any remarks upon them.

HISTORY.

If the actual date and source when and whence swine fever originated can not be fixed, all the evidence at our command tends to the conviction that it must have been introduced from the Continent of Europe some time prior to the year 1858.

No records appear to have been kept by the customs of the number of pigs imported before the year 1859, but a very large number were sent to this country during the period which followed, the number of pigs imported in the following years being 11,045 in 1854, 12,134 in 1855, 9,940 in 1856, 10,671 in 1857, 11,544 in 1858, 11,058 in 1859, 24,458 in 1860, 30,275 in 1861, and 18,133 in 1862. Nearly all these animals came from countries in which swine fever existed.

It is an admitted fact that prior to the erection of foreign animals' wharves the inspection carried out by the veterinary surgeons at the ports was of a very perfunctory character. The animals were brought in small steamers to certain wharves sanctioned by the customs for their landing; no sheds were set aside for their reception, but they were driven straight from the vessels into the adjacent streets where after a general inspection they were allowed to be removed either to the metropolitan market, which was then held at Smithfield, or elsewhere, the custom being to detain only the diseased or injured animals and to allow the others to be taken away.

Viewed in the light of our present knowledge of the difficulty which at times exists of detecting swine fever in the living animal, there can be no doubt that the disease was frequently introduced by means of foreign animals; and I have it on the authority of Mr. S. G. Holmans, the senior veterinary inspector of the board of agriculture for the port of London, who held the post of veterinary inspector to the customs in 1858, that soon after his appointment in that year he frequently found cases of "red soldier" (a name given to swine fever in the trade) among pigs imported from the Continent.

It is not, therefore, unreasonable to infer that prior to the year 1858 numbers of pigs affected with swine fever must have been landed in this country. The disease, however, was not likely at that time to spread rapidly, as for many years the majority of the pigs landed in London found their way to a firm of slaughterers who were in a large way of business at the East End. It must also be borne in mind that movement by rail at this period was expensive; and further, the demand for pigs in country districts was very limited. This combination of

circumstances would account for the disease spreading tardily into the interior of the country.

It was not until 1862 that the disease was discovered among home-bred pigs by Professor Simonds, who informs me that he first saw it on a farm belonging to a Mr. Cantrell, residing near Windsor.

Very soon after his visit to Mr. Cantrell's farm Professor Simonds heard of serious outbreaks in or near Somersetshire, and two years later (1864) Professor Brown witnessed an extensive outbreak at Buscot Park, in Berkshire, where he found on his arrival some 40 or 50 pigs dead and upward of 500 more either dying or in such a condition that they had to be killed by the owner.

It was in this year (1864) that Dr. Budd, an eminent physician residing at Bristol, became acquainted with the disease at the Clifton workhouse, and in the following year he brought the subject before the Royal Agricultural Society. Cases of the disease were also about this time seen by the late Prof. John Gamgee in Edinburgh. It is evident, therefore, that by 1864 the disease had become widely distributed in Great Britain.

From the year 1865, when the infectious nature of swine fever was first fully recognized, until 1878 it continued to spread in Great Britain and in Ireland unchecked, and with the increased facilities for movement by rail, it is not surprising to find that by the latter year it had been carried into nearly every county in England and into some of the counties of Scotland and Wales.

Prior to 1879 no returns were received by the privy council, swine fever not being included within the list of contagious diseases. There was, therefore, at that time no reliable information as to the extent of country then invaded. The veterinary officers of the board, who, prior to that date were acting as advisers to the privy council, had, however, long been familiar with the disease and from time to time became acquainted unofficially, through the members of the profession and agriculturists, with serious outbreaks and the losses incurred.

At the urgent request of some local authorities, more particularly Norfolk, swine fever was included in the list of contagious diseases at the end of the year 1878. Local authorities were given power to deal with the affection within their districts, and in subsequent years orders declaring infected areas and closing markets for the sale of pigs, except for slaughter, were issued by the privy council.

It can not, however, be said that any results calculated to be of permanent good were derived from the measures adopted, inasmuch as the action of local authorities varied in proportion to the personal interest they took in the matter. In some of the urban districts the subject was regarded as of little or no importance, and in those rural districts where the losses were comparatively small, local authorities displayed no energy in its eradication.

It was not until November, 1893, that, at the urgent request of the agriculturists, the board of agriculture was called upon to make an attempt to stamp out the disease. No duty so difficult or troublesome had ever been imposed upon the veterinary department since it was created in 1865 for the purpose of stamping out cattle plague. This is evidenced by the fact that swine fever has never yet been eradicated from any country where it has once obtained a good foothold.

From the foregoing history of swine fever in this country it will be observed that from 1858, at which time there is evidence that the disease was being introduced from abroad, until the year 1879, when it was first legislated for by the privy council, it was permitted to extend over Great Britain and Ireland without any attempt to check its progress, and that from 1879 until November, 1893, such measures as were adopted were of a varying and tentative character.

When it is taken into consideration that swine fever is a disease which combines with the fatality and contagious properties of cattle plague the occult nature of pleuro-pneumonia and is spread by pigs which, without being suspected of being diseased, are daily infecting the sties, soil, carts, trucks, and

markets in which they are placed, it can hardly be expected that, after having a widely spread existence throughout the country for a period of certainly not less than thirty years, it will be exterminated as rapidly as other contagious diseases of stock which have succumbed to what is termed the stamping-out process.

SYMPTOMS OF SWINE FEVER.

The clinical manifestations of swine fever have been so often and so fully described by various writers from the time when Dr. Budd wrote his treatise on the disease in the year 1865 that it would be unnecessary to repeat them if it were not for the fact that of late years it has become more and more evident that swine fever is not in all instances so extremely fatal a disease nor so easily recognized in the living animal as was formerly supposed.

The experimental work carried out by the departmental committee appointed in 1895-96, combined with the extraordinary opportunities which have lately been afforded the veterinary officers of the board of examining the lesions found in the viscera of pigs of all ages and sizes, have clearly established the fact that swine fever may assume two distinct forms, viz, the acute and fatal and the nonacute or slowly progressive.

In the acute form all those symptoms which are indicative of a severe febrile affection are present. The animals are disinclined to feed; they present evidence of great prostration and lie about their dwellings in a listless manner sheltering themselves from cold; their skins are hot, their eyes partially closed, and they are obviously suffering from some severe constitutional disturbance. Within a very few hours after these premonitory symptoms have set in the pigs become rapidly worse; they may or may not have a deep red blush on the skin, which is more particularly noticeable on those parts of the body where there is an absence of hair, such as the inside of the thighs, the point of the axilla, and over the abdomen. Choleraic evacuations, having a most offensive odor, succeeding upon constipation, follow later on, and the animals die perhaps as early as the third or fourth day after the symptoms have first been observed.

In some instances the disease proceeds with great rapidity through a herd, the symptoms being of a most aggravated and pronounced character, and the outbreak attended with great fatality.

Generally speaking, the above description depicts the symptoms of swine fever in the acute form, more especially when it breaks out in a herd of young pigs.

In the nonacute form the disease progresses slowly, the clinical evidence is extremely obscure, the reddening of the skin, formerly regarded as being invariably present in swine fever, is absent, and beyond the fact that the animal is unthrifty, develops slowly, and perhaps has a constantly relaxed condition of the bowels, it may be asserted that there are no symptoms which could be regarded as absolutely indicative of swine fever, and nothing short of a post-mortem examination will enable even an expert to satisfy himself that the animal was affected with the disease.

As a general rule swine fever assumes this nonacute and slowly progressive form in pigs which have arrived at an age when their powers of resistance to disease are materially increased, i. e., in animals of eight or more months old; on post-mortem examination they are found to have been extensively diseased, more particularly in the large intestine, a portion of the digestive apparatus which does not appear to perform any very important function in connection with the nutrition of the animal, and so long as the stomach and small intestines remain healthy, pigs with a considerable amount of disease in the large intestine may still keep up their condition for a considerable time.

ETIOLOGY OF SWINE FEVER.

One of the primary objects for the appointment of the departmental committee in 1895 was to determine the etiology or cause of swine fever. So far back as 1865 Dr. Budd, of Bristol, who had a most favorable opportunity for studying the disease at the Clifton workhouse, near Bristol, stated in a paper which he read at a meeting of the Royal Agricultural Society; held that year at Plymouth, that he "regarded swine fever, like typhoid fever in man, to be specific in its character and due to poisonous germs which were evacuated by the diseased pigs," and he further observed what is equally important that it "was a disease which was not communicable to other animals."

Dr. Budd's statement that this disease of the pig was due to poisonous germs was made at a time prior to the germ theory of communicable diseases being accepted and long before the study of bacteriology had begun in this country.

Professor Axe, late of the Royal Veterinary College, in 1875 added materially to our knowledge on this subject, and drew particular attention to the fact that swine fever could be communicated by mediate contagion; in other words, that there existed a special germ which could be transferred from diseased to healthy pigs without contact of the animals.

Dr. Klein, however, was the first in this country who dealt with the etiology of swine fever from a bacteriological point of view, and in a very exhaustive report, which he prepared for the local government board in the year 1877, he records a series of experiments conducted by him at the Brown Institution, during which he isolated a bacillus which he regarded as the cause of the disease.

As regards the etiology of the swine fever of this country no question now exists. It has been proved to demonstration by the bacteriological inquiry conducted by one of the committee, Professor McFadyean, that it is due to a special pathogenic organism, a bacillus, which, after cultivation in artificial media, will produce in the healthy pig fed with the pure cultures the typical ulcerations which are found in the intestines of pigs affected with swine fever contracted in the ordinary way.

An experiment of this description must afford more satisfactory and conclusive evidence as to the pathogenic property of an organism than one conducted upon animals of another species in which the characteristic lesions are produced.

Dr. Klein's investigation led him to conclude that swine fever was a disease in which the lungs as well as the intestinal tract were at times affected, and as a result he applied to the disease the name of "pneumo-enteritis," and there are some persons in this country who still apply this term to swine fever.

The observations, however, which were made by the veterinary officers of the board when examining the viscera forwarded to the laboratory for examination, caused them to doubt whether there was any disease of the lungs of pigs which, in the absence of lesions in the intestinal tract, could be accepted as evidence of swine fever.

This most important point which had been raised by the veterinary officers of the board was included in the inquiry made by the departmental committee, and it will be explained hereafter that the views of the board's officers have been corroborated by a series of experiments conducted with the object of determining this question.

Another and most important fact was revealed by these experiments, namely, that the bacillus which produced swine fever when introduced in the healthy pig did not induce any special disease of the lungs. These experiments were conducted upon upward of sixty pigs, and in the few instances in which any changes from the normal were observed in the lungs the lesions were of such a character as might have originated from other causes.

PATHOLOGY AND MORBID ANATOMY OF SWINE FEVER.

It is of special interest to note in connection with this subject that the views expressed by Dr. Budd in 1865 as to the pathology of swine fever have in no way been modified or added to by recent research.

It is quite true that Dr. Klein's experiments led him to believe that swine fever was a disease which located itself at times in the lungs as well as the intestines; but the experience of the board's officers and the results of the experimental inquiries into the etiology of swine fever before alluded to clearly demonstrate that swine fever, like typhoid fever in man, is essentially a disease of the digestive system, its chief characteristic being certain morbid changes of a well-marked nature which are found upon the surface of the mucous membrane in some part of the alimentary canal.

The changes referred to consist of what have been commonly described as the formation of a series of ulcers, single or confluent, distributed upon some part of the intestinal tract varying in size and shape, of a yellowish gray to black color, and assuming as a rule a circular form. In some instances the lesions consist of diphtheritic exudations with necrosis of the lining membrane of the bowels.

These ulcers or necrotic patches may be found upon the tongue, tonsils, epiglottis, stomach, and small intestines, but they are more constant in the large intestines, especially the cæcum and colon. The lesions may involve the whole thickness of the mucous membrane, but seldom penetrate the other coats of the intestine; in fact, perforation of the peritoneal covering of the bowel is very rare in even prolonged cases of swine fever.

In cases where swine fever assumes the more acute form and death supervenes rapidly, it is usual to find that the small intestines are largely involved.

In the nonacute or slowly progressing form the lesions are more abundant in the large intestines, and in some instances the walls of the intestines become so thick as a result of infiltration into their structure and the excessively thick deposits upon the lining membrane that it becomes a matter of surprise that the passage of the ingesta has been possible and that the animal has lived so long.

Next to the intestinal lesions the congested condition of the lymphatic glands, especially those of the mesentery, may be considered as most prominent among the pathological changes which occur in swine fever. Occasionally centers of necrosis are observed in the liver, and some writers refer to changes in or upon the spleen and kidneys.

The only lesions which can be characterized as absolutely typical of swine fever are those present in the bowels, the absence of which will justify any observer in declining to accept the case as one of swine fever without some further evidence or inquiry. It must, however, be distinctly understood that in the case of very young pigs which have died shortly after infection there is often an entire absence of the lesions described, the only changes present being inflammation of the stomach or some part of the intestines.

Further, there are instances where older pigs have been slaughtered in the early stage of the disease in which no definite lesions have been found, and in such cases inquiry into the condition of the rest of the herd becomes necessary.

One most important feature in connection with the morbid anatomy of swine fever which has come prominently before the notice of the officers of the board is the disposition which many animals have to recover from the disease; evidence of the reparatory process having often been detected in the intestines after they had been carefully washed. This fact came under the notice of Dr. Budd in 1865, who then remarked, "that in advanced cases I found the ulcers had disappeared over the whole extent of the morbid deposits, leaving sores upon the surface of the mucous membrane, and in some specimens the ulcers appear in the form of deep excavations."

Dr. Klein also maintained that many pigs took the disease in the mild form and recovered without presenting any of the marked symptoms of swine fever.

The experiments of the departmental committee and the experience of the veterinary officers of the board fully corroborate these opinions, as it was found that, whether infected in the ordinary way or by direct inoculation, in some pigs killed only a few days after being infected, the ulcers were occasionally seen gradually detaching from the surface of the intestines, and cicatrization had already commenced.

VERRUCOSE ENDOCARDITIS.

In the report of this department for 1894, reference was made to the numerous instances in which the hearts of pigs forwarded for examination to London had been found affected with verrucose endocarditis.

Reference was also made to the circumstance that this form of disease of the heart was known to veterinarians in Great Britain as far back as the year 1847. For reasons given in that report it became obvious that this diseased condition of the valves of the heart was not produced by swine fever. The question arose whether in addition to swine fever we had another disease to contend with, known on the Continent under the name of swine erysipelas. The importance of this question will be appreciated when it is explained that on the Continent swine erysipelas is classed among the contagious diseases of the pig.

Under these circumstances it became necessary to make inquiries into the etiology and pathology of the disease existing in this country in order to determine whether the measures enforced for the eradication of swine fever should also be extended to this disease.

The clinical evidence of the disease called swine erysipelas on the Continent appears to be more or less discoloration of the skin, similar to that which is frequently observed in swine fever, together with the occasional presence within the warty growths upon the valves of the heart of a bacillus which is regarded by continental authorities as the cause of the disease.

Early in the inquiry it was ascertained that a bacillus identical with that found in swine erysipelas was also present in the diseased portion of the valves of the heart of the pigs in this country.

But the inquiries made by the officers of the board did not corroborate or favor the suggestion that the disease which produced these morbid growths was in any way infectious or contagious. Such inquiries as could be made led to the opposite conclusion, since in every instance where the cases could be followed up it was ascertained that the deaths had been quite sudden, were limited to the single animal, and that those in contact remained in perfect health.

At this stage the all-important point to determine was whether the disease which existed in this country, "verrucose endocarditis," was communicable from pig to pig, and with this object numerous experiments have been conducted to discover whether the bacilli found within the hearts of diseased pigs were pathogenic to healthy swine.

A large number of healthy pigs have been fed or inoculated with the blood, the diseased portions taken from the valves of the hearts, and with artificial cultures of the bacilli obtained from the hearts, but in no instance has the attempt to produce this disease been successful.

PNEUMONIA OF THE PIG.

The occasional association of pneumonia with or without pleurisy in cases of swine fever has led many veterinarians in this country to regard lung complications as one of the lesions produced by that disease.

The views expressed by Dr. Klein in his report on swine fever, to which refer-

ence has already been made when dealing with the etiology of this disease, have no doubt tended to strengthen those opinions.

In the board's report for the year 1894 a description was given of the various diseases in the lungs of swine which had come under the notice of the veterinary officers of the board when conducting post-mortem examinations, and as a result of the opportunities and experience afforded them it was therein stated that they had been unable to discover any special lesion of the lung which would warrant them in stating that it was indicative of swine fever or due to contagion.

It is an indisputable fact that pigs are extremely liable to pneumonia and pleurisy; the tables of the laboratory in Whitehall afford abundant evidence of this. But as the clinical appearances present in the lungs forwarded in no wise differed from those which take place in the lungs of other animals which have been exposed to cold or septicæmia and other causes, the board's officers have never accepted these lesions as being specific.

It is well known that both in Germany and the United States outbreaks of pneumonia of a contagious nature attributed to the presence of a bacillus pathogenic to the pigs of those countries are reported to occur. Indeed, contagious pneumonia of swine under the names of *schweinesuche* in Germany and swine plague in America are regarded as one and the same disease.

In view of the fact that in a large number of cases pneumonia, more or less extensive, sometimes associated with pleurisy, was found among the specimens forwarded to London, it was considered desirable that the departmental committee should institute a series of experiments to decide whether we had in this country a form of pneumonia in the pig which was communicable from one pig to another.

Accordingly a series of bacteriological experiments were conducted by Professor McFadyean with a view to isolate, if possible, a microorganism which would be capable of inducing pneumonia in healthy pigs. A number of diseased lungs, some of which were taken from pigs affected with swine fever, were examined microscopically by him, and, as was to be expected, several organisms were isolated, but they proved to be morphologically and culturally different from the bacillus of swine fever. Inoculations were carried out with these organisms not only subcutaneously but directly into the lung through the walls of the chest, and feeding experiments were also conducted. The results of these experiments were entirely negative; a certain amount of local injury was caused to the lungs at the seat where they had been punctured, but in no case was either pneumonia or swine fever induced.

The experiments have therefore demonstrated that the pneumonia found in the lungs of pigs affected with swine fever is not due to the swine fever bacillus.

The departmental committee, as the result of the observations and experiments on this head, arrived at the conclusion that the pneumonia which is occasionally encountered as an independent disease of the pig or in association with swine fever is not ascribable to contagion, but to the presence of organisms that are generally saprophytic in their mode of life, and which only in particular circumstances (such as lowered vitality and diminished resistance on the part of the pig) are able to multiply in the air passages and lung tissue and thus induce pneumonia; and it appeared to the departmental committee that in this country pneumonia of the pig is sporadic and not contagious or epizootic.

CONCLUSIONS.

A careful perusal of the two reports which have been issued by the departmental committee and the decision at which they arrived should satisfy the reader that there is now no reason whatever to believe that there exists at the present time in Great Britain any disease of a contagious nature affecting pigs other than swine

fever. Further, that the disease of the heart, "verrucose endocarditis," and the pneumonia which are so frequently met with in pigs can not be regarded as lesions indicative of an attack of swine fever.

As regards verrucose endocarditis and pneumonia, it may safely be said that they do not exist here in a contagious form. If they did the fact must at some time during the last three years have been brought under the notice of the veterinary officers of the board for the following reasons: Between the 1st of January and the 31st of December, 1896, they examined no less than 13,221 sets of viscera. Among these they observed hundreds of cases of heart disease, and pneumonia sometimes combined with pleurisy, all of which were rejected as not being indicative of swine fever if not associated with swine-fever lesions in the intestinal tract, and in no instance was any extension of either of those diseases subsequently reported.

In addition to the above specimens, the veterinary officers during 1896 examined and decided what action, if any, should be taken upon 12,149 other reports forwarded by veterinary surgeons from various parts of Great Britain, and in no single instance met with any evidence in those reports that the pigs on the premises were affected with a disease of the lung which could be said to possess the characteristics of a contagious disease. Under these circumstances it may reasonably be concluded that the departmental committee were correct in their views when they stated that "the evidence obtained during the whole inquiry justifies the conclusion at which they have arrived, viz, that there is no epizootic of swine except swine fever in any part of the United Kingdom which requires to be dealt with under the provisions of the act of 1894."

The decision on the part of the departmental committee is entirely in accord with the experience of and corroborates the views expressed by the veterinary officers of the board in the reports of this department for the years 1894 and 1895.

Finally, as an outcome of all the inquiries made by the departmental committee, and of the experience of the officers of the board, it may be said that the great factors in perpetuating swine fever will always be pigs which are affected with that disease in the less fatal and unrecognizable form. These animals are constantly distributing the germs of swine fever through their highly infective evacuations wherever they may be taken during the whole period of their illness, and the final extinction of the malady must depend upon the possibility of enforcing measures which will have the effect of preventing the movement of pigs affected with swine fever in this particular form.

During the year 1896 there have been forwarded to the laboratory 13,221 sets of viscera of pigs, in 5,288 of which evidence of swine fever was detected. This is a decrease of 1,300 in the number of cases confirmed by the veterinary officers of the board as compared with the previous year. This marked decline has occurred in the last six months of the year, the number of outbreaks during the last half year of 1896 being 1,919 compared with 3,865 in the corresponding period of 1895.

In some of the counties where swine fever was formerly exceedingly rife and the losses in the past have been enormous very good results have been obtained. For instance, in the county of Somerset, where the outbreaks in 1895 numbered 641 and the pigs slaughtered amounted to 11,124, they fell to 204 outbreaks and 3,814 pigs slaughtered in 1896. In the West Riding a corresponding falling off in the outbreaks has occurred, namely, from 658 in 1895 to 431 in 1896; and in Cornwall also the outbreaks, which amounted to 116 in 1895, fell to 23 in 1896.

On the other hand, in Derbyshire, Kent, Leicestershire, Lincolnshire, Middlesex, Nottinghamshire, and Warwickshire, there was a considerable increase in the number of centers of the disease.

In Wales the outbreaks fell from 334 in 1895 to 244 in 1896; this reduction would have been much greater but for the extension of the disease in Glamorganshire, where they rose from 95 in 1895 to 141 in 1896.

In Scotland there was an increase in the counties of Aberdeen, Ayr, and Midlothian, while in the counties of Clackmannan, Fife, Kirkcudbright, Linlithgow, and Stirling, which were free in 1895, the disease was reported in 1896.

The total number of outbreaks confirmed during the year 1896 was 5,166, which is 1,139 less than in the previous year. The total number of pigs slaughtered was, however, somewhat greater, being 79,586, as compared with 69,931 in 1895.

The following table, which is otherwise similar to those prepared in former years, includes for the first time the number of cases of tuberculosis detected in the viscera sent for examination to the laboratory. It will be observed that tuberculosis is by no means a common disease of the pigs in this country, a fact which may be regarded as somewhat remarkable when it is borne in mind that pigs have access to, and are frequently fed upon, offal of diseased animals.

Experience in the laboratory demonstrates that the lesions of tuberculosis in swine are rarely found in any other organs than the lungs and spleen; that they are very seldom met with on the surface of the serous membranes, and when present in the lungs they nearly always assume the form of miliary deposits. In this respect tuberculosis of the pig more nearly resembles tuberculosis in the lungs of man than it does when it attacks the lungs of other domesticated animals.

Monthly returns of post-mortems of swine made during the year 1896.

Month.	Number of viscera examined.	Number of swine-fever cases detected.	Number of diseased hearts.	Number of cases of tuberculosis.
January	1,728	532	41	32
February	1,568	558	30	25
March	1,405	462	34	21
April	1,577	589	24	14
May	1,288	638	15	18
June	1,216	523	16	5
July	941	378	24	5
August	881	382	42	10
September	878	353	36	12
October	669	301	44	2
November	605	263	25	10
December	745	304	14	5
Total	12,221	5,238	345	159

PLEURO-PNEUMONIA.

Only one case of pleuro-pneumonia was discovered in 1895, and that by a butcher in East London. The origin of the animal was traced, and all cattle which had come in contact with it were killed, but no further trace of the disease was found.

In 1896 there were 90 reports of suspected outbreaks, but a careful examination limited the disease to two of them. In connection with these two outbreaks 189 cattle were killed, and out of this number 9 cases of pleuro-pneumonia were found.

ANTHRAX.

In 1895 there were 434 outbreaks of anthrax in Great Britain, and the number of animals attacked was 934. About two-thirds of the animals attacked were cattle. In most cases the spread of the disease could have been prevented if the ordinary precautions had been taken against the spilling of the blood of the diseased animal on the premises. It was noted as a matter of interest and importance that there was a tendency for this disease to recur on certain farms, in some instances three or four times, and in one instance six times. "It is easy to understand that where a farm becomes infected to such an extent as above described the owner seeks everywhere to find some means of prevention, and it is much to be regretted that no safe method has yet been discovered." Notwithstanding, the chief veterinary officer, in his report for 1896, says "it can not be said that anthrax can be regarded as a disease of very great importance in this country."

In 1896 there were about two cases to each outbreak, the same proportion which existed in 1895. Of the 904 cases reported, 632 were cattle, 34 sheep, 200 swine, and 38 horses. It is noted that anthrax in Great Britain nearly always originates among cattle.

GLANDERS.

It is stated that the number of cases reported in 1894 was 1,172 and in 1895, 1,273. This increase is simply an increase of cases reported, due to better methods of detecting the disease in the use of mallein. "The general experience is that the mallein test can be regarded as a thoroughly reliable agent for the detection of glanders in its occult form when no external manifestations of the disease are present."

The disease was not so prevalent in 1896, 300 fewer cases being reported than in 1895. Upon inquiry, the conclusion was drawn that this decrease was due to the greater precautions being taken to prevent the introduction and spread of the disease. Mallein was used extensively, apparently with the most satisfactory results.

RABIES.

The number of cases of rabies reported in 1895 was 672, a remarkable increase over any previous year. In 1894 the number of cases was 248. It is said that the perpetuation of the disease is due to stray dogs. Of the 672 cases mentioned 273 were of this class, and it is suggested that the only means of eradication is to seize the ownerless animals. In the above total are included 55 other animals; 5 of them being cats.

The seizure and slaughter of ownerless dogs, as suggested in 1895, and muzzling those that had homes, materially reduced the number of cases of rabies in 1896. During this year 438 cases were reported and 323 dogs were killed because they had been exposed to the infection. Nearly a third of those attacked were stray dogs. In addition to the dogs, 4 cattle, 17 sheep, and 1 horse were attacked.

SHEEP SCAB.

Sheep scab was reported from every county in England in 1895 except Berks, Dorset, and Scilly Isles, from every county in Wales, and from all counties in Scotland but five. The number returned as affected was 48,663, but it was assumed that this not nearly covered the number that was really affected and would have been detected by a careful individual examination. An order was issued this year which gave to the local authorities power to deal with diseases within their district, and to prevent the movement of sheep into their district from that of any other local authority.

In 1886 the board of agriculture reports that the disease remains as prevalent as ever, so far as its distribution is concerned. The sheep reported as being affected with scab was 48,688, a number so nearly like that for 1895 that it is a coincidence. It is remarked that Dorset County, which was reported free from scab in 1895, was also free in 1896, although it had 370,000 sheep within its borders, and was surrounded by counties in which the disease existed. The disease is far less prevalent in Scotland than in Wales.

FRANCE.

The following tables show the condition of France with reference to contagious diseases of animals for the years 1895 and 1896. They are compiled from the sanitary bulletin issued monthly under the direction of the minister of agriculture:

Number of outbreaks of contagious diseases among animals in France during the year 1896.

Name of disease.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Contagious pleuro-pneumonia.													
Number of outbreaks.....	20	19	26	23	25	17	22	19	13	14	12	14	224
Number slaughtered.....	44	52	80	52	54	42	47	49	48	25	28	18	539
Number inoculated.....	196	236	275	202	223	107	144	89	114	219	92	84	1,980
Apthous fever.....	187	28	17	130	106	69	51	17	21	18	9	25	677
Sheep scab.....	12	7	10	30	12	9	7	3	7	4	7	2	110
Sheep pox.....	32	24	29	15	9	23	72	152	145	135	83	85	804
Anthrax.....	27	27	16	24	23	21	45	63	46	40	36	26	394
Blackleg.....	46	33	54	42	51	45	47	66	49	110	106	81	730
Glanders and farcy.....	63	44	68	53	75	87	73	83	63	79	75	70	833
Rabies (cases).....	89	155	153	184	181	129	157	147	133	110	105	149	1,662
Rouget.....	16	13	20	29	26	84	26	69	17	39	31	35	405
Tuberculosis.....	258	218	259	259	307	279	268	317	202	270	251	249	3,237
Hog cholera.....	90	63	43	61	81	51	97	201	65	55	41	37	885

Number of outbreaks of contagious diseases among animals in France during the year 1896.

Name of disease.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Contagious pleuro-pneumonia:													
Number of outbreaks.....	15	9	19	17	26	18	12	19	11	13	12	18	199
Number slaughtered.....	45	13	34	43	55	23	30	19	39	20	34	45	400
Number inoculated.....	120	19	121	190	145	181	33	140	147	65	146	108	1,413
Apthous fever.....	36	88	294	144	165	202	164	181	189	469	204	198	2,334
Sheep scab.....	26	21	11	9	11	27	2	4	1	15	9	22	153
Sheeppox.....	40	00	43	33	51	30	27	23	14	14	41	29	405
Anthrax.....	29	21	27	33	24	34	32	25	27	48	27	25	268
Blackleg.....	90	58	50	49	44	71	64	66	79	133	155	110	969
Glanders and farcy.....	60	52	88	102	97	94	64	95	74	87	60	64	937
Rabies (cases).....	124	138	151	150	147	199	138	117	131	125	103	164	1,687
Rouget.....	15	17	17	13	39	54	113	67	123	91	68	30	677
Hog cholera.....	39	44	30	37	39	12	51	46	22	14	9	4	347

NORWAY.

The records received from Norway are not complete, but such as are available are embodied in the table given below, being compiled from the monthly bulletin on animal diseases issued by the Norwegian Government:

Table showing the number of cases of contagious diseases reported for certain months of 1895 and 1896.

Month.	1895.					1896.				
	Anthrax.	Black-leg.	Braxy.	Malignant catarrhal fever of cattle.	Rouget.	Anthrax.	Black-leg.	Braxy.	Malignant catarrhal fever of cattle.	Rouget.
January.....						20	1	9	10	25
February.....						14	1	3	23	31
March.....						27	4	1	52	39
April.....						24	2	1	20	29
May.....	40	2	1	24	42	28	1	1	23	20
June.....	28	1	2	14	87					
July.....	20			30	155	289	1		12	92
September.....	15	1		15	129					
October.....	29		19	23	148					
December.....	20		20	5	33	25			18	29
Total.....	152	4	42	111	504	427	10	15	163	297

BELGIUM.

There were in Belgium during the year 1896 outbreaks of contagious animal diseases as follows: Glanders and farcy, 140; apthous fever, 460; anthrax, 285; blackleg, 230; foot rot, 2, and pleuro-

pneumonia 1; 94 cases of rabies were reported. The later months of the year showed a marked increase in the number of cases of aphthous fever. Vaccination against anthrax, blackleg, and rouget is practiced.

HUNGARY.

The following statements are compiled from official documents of the Hungarian Government:

ORIENTAL CATTLE PLAGUE.

The Oriental cattle plague has not been discovered in a single instance in the year 1896.

ANTHRAX.

The existence of anthrax has been officially established in 59 counties, affecting 191 horses, 1,780 cattle, and 1,074 sheep. Compared with 1895, it is shown that the counties infected are fewer by 1, while 59 fewer horses were affected, 591 fewer cattle, and 83 fewer sheep. There died from the disease 190 horses, 1,703 cattle, and 800 sheep, this being 57 horses, 516 cattle, and 356 sheep fewer than in the preceding year. The proportion of the entire number of animals lost is as follows:

Animal.	1896.	1895.
Horses	0.000	0.012
Cattle	.029	.083
Sheep	.010	.015

RABIES.

This disease has been found in 60 counties, the cases being 1,274 dogs, 14 horses, 74 cattle, 8 sheep, and 63 hogs. Compared with 1895, the number of counties was 3 greater in 1896. The number of dogs affected was 47 greater; of horses, 1; cattle, 14; and sheep, 7; while there have been 33 fewer hogs affected.

One hundred and one dogs died, 1,049 were killed, and 124 escaped. Of the animals suspected (having been bitten) the following were killed: 3,826 dogs, 7 horses, 1 donkey, 9 cattle, 62 sheep, 1 goat, 27 hogs, 133 cats, 11 fowls, and 38 other animals.

GLANDERS.

Glanders was officially announced as existing in 53 counties, affecting 628 horses. Comparison with the previous year shows the number of counties affected to be one fewer and the number of horses 549 fewer. Of the 628 horses affected 602 were killed and 26 died. Besides these, 53 horses which were suspected were killed, making a total of 681 horses lost, 560 fewer than the year 1895. The loss represented 0.034 per cent of the total number of horses.

FOOT-AND-MOUTH DISEASE.

This disease has prevailed in 63 counties and affected 572,809 cattle, 178,612 sheep, and 82,931 hogs. In the preceding year 13 more counties were affected, but the number of cases have increased in 1896 as follows: Cattle, 290,527; sheep, 152,992; and swine, 22,990. The disease caused the death of 824 cattle, 188 sheep, and 80 hogs, while in 1895, 465 cattle, 23 sheep, and 314 hogs died.

PLEURO-PNEUMONIA.

This disease has been identified in 9 counties, with 313 cases. Of these cases 1 died and the remaining 312 were slaughtered by order of the authorities. Besides these, 781 were killed on suspicion and 7,563 were sent to the slaughterhouse on account of having been exposed to the contagion. The total loss for the year on account of the disease was 8,657.

SHEEP POX.

Sheep pox affected 938 sheep during the year in 5 counties. Of the 938 sheep affected, 684 recovered, 254 died, the total loss reaching 37.1 per cent of the sick. In the previous year the number affected was 2,274, of which 265 died, the percentage being 13.1.

FOOTHALT AND HIVES.

This disease was reported from 1 county only, wherein a stud of 12 stallions were affected, and in consequence were castrated.

BLISTER UPON THE GENITALS.

This appeared in 15 counties and affected 118 horses and 217 cattle. This is an increase in cases of 39 horses and a decrease of 121 cattle over 1895.

SCAB.

Scab was reported from 44 counties, and 1,713 horses, 119 cattle, and 4,156 sheep were affected. The counties affected were 12 fewer than the previous year and the number of horses 787 fewer, while there was an increase of 87 cattle and 153 sheep. The loss of horses affected was 3.27 per cent and the loss of sheep 3.77. Last year the loss of horses affected was 2.76 per cent and the loss of sheep 12.11 per cent.

RED MURRAIN OF SWINE.

This disease affected 28,806 hogs in 52 counties. This is a decrease over 1895.

HOG CHOLERA.

Hog cholera appeared in 56 counties and attacked 868,777 head. This is an increase over 1895 of 15 counties and 455,215 head. Of the sick hogs, 639,765 died and 13,093 were killed. In addition to these, 17,977 were slaughtered because of suspected infection. The total loss was therefore 670,853 for 1896 and 365,444 for 1895.

BUFFALO CHOLERA.

There were 350 cases of this disease, and they were reported from 7 counties. This is a decrease over 1895 of 2 counties, but an increase of 144 cases. Of the 350 cases, 333 died, making a loss of 25 per cent.

DENMARK.

Table showing extent of contagious diseases and number of animals under public supervision for the year 1896.

[From reports of the Danish Minister of the Interior.]

1896.	Anthrax.	Foot-and-mouth disease.	Cerebro-spinal meningitis.	Glanders.	Malignant catarrhal fever.	Swine plague or hog cholera.	Rouget.		
							Acute.	Chronic.	Nodular erythema.
January	17	.....	4	.....	13	.....	25	14	73
February	9	.....	1	1	8	.....	27	4	60
March	12	.....	4	.....	8	.....	30	1	20
April	16	6	2	.....	6	.....	33	.....	55
May	16	.....	1	.....	6	1	21	2	46
June	5	.....	.....	.....	13	1	25	4	133
July	4	.....	1	.....	23	.....	49	4	270
August	5	.....	5	.....	15	.....	79	9	328
September	7	.....	1	.....	6	.....	67	13	428
October	13	8	1	.....	4	.....	57	20	402
November ¹	14	.....	1	.....	8	1	82	18	260
Total	118	14	21	1	100	8	493	89	2,244

¹ Report for December not received.

SWITZERLAND.

Statement of numbers of cases of contagious diseases among domestic animals in Switzerland for the year 1896.

Month.	Blackleg: Died and slaughtered.	Anthrax: Died and slaughtered.	Foot-and-mouth disease.				Rabies.			Glanders and farcy: Died and slaughtered.	Rouget: Died and slaughtered	Sheep scab.	
			Large cattle.		Small cattle.		Died and slaughtered.	Slaughtered as suspicious.	Died and slaughtered.			Died and slaughtered.	Infected and exposed.
			Died and slaughtered.	Infected and exposed.	Died and slaughtered.	Infected and exposed.							
January	12	15	2	221	.....	24	3	.....	6	384	.....	.....	
February	5	26	50	259	.....	12	6	.....	3	177	.....	6	
March	20	15	.....	203	.....	68	6	.....	4	533	.....	3	
April	157	20	24	384	.....	25	2	.....	5	171	.....	1	
May	114	30	23	175	.....	147	3	.....	.....	395	.....	.....	
June	88	25	1	168	.....	50	2	.....	5	500	.....	.....	
July	185	28	.....	236	.....	4	.....	.....	.....	843	3	.....	
August	157	29	.....	40	.....	3	1	.....	3	1,501	.....	.....	
September	91	24	.....	.....	.....	.....	.....	8	3	786	.....	.....	
October	50	28	.....	162	.....	80	9	2	1	602	.....	.....	
November	22	18	17	247	.....	49	2	.....	4	582	.....	.....	
December	11	24	29	114	.....	4	6	24	3	365	.....	.....	
Total.....	912	291	149	2,209	.....	466	40	34	37	6,859	3	10	

THE CURING OF BACON.

Hog raising is one of the most important animal industries of the United States. This is attested by the fact that in the year 1896 alone there were on our farms nearly 41,000,000 head, valued at \$166,272,770.¹ The industry is extensive, every State and Territory contributing to the supply. This being the case, every effort that is made to increase the demand for American pork products is of personal interest to every farmer. He can raise hogs easily and he desires a remunerative market for them. The price is the main thing for the farmer to keep in mind; all other considerations—breeds, feeds, methods of curing, transportation, etc.—necessarily must be shaped to this end. He must prepare for the market those pork products for which there is a demand, and this at the least possible cost to himself. Herein lies the secret of profit or loss. Therefore the successful hog raiser will study breeds, feeds, causes of market fluctuations, and best methods of preparing his products for the market.

Let us survey the foreign markets for our pork products, with a view to obtaining some hint as to what is desired abroad. The accompanying table shows the amount and value of pork products that were exported to all countries during the calendar year 1896:

Exports of pork products to all countries.

Name of product.	Quantity.	Value.
	<i>Pounds.</i>	
Bacon	430, 859, 660	\$31, 057, 506
Hams	159, 912, 852	15, 224, 842
Pork (fresh and pickled)	63, 850, 513	3, 223, 147
Lard	520, 320, 203	29, 821, 308

However, as the United Kingdom is by far the best market we have, our attention should be given to its demands in the way of quantity and quality. During the year 1896 we exported to that country pork products as follows:

Exports of pork products to the United Kingdom.

Name of product.	Quantity.	Value.
	<i>Pounds.</i>	
Bacon	334, 042, 167	\$24, 755, 344
Hams	125, 572, 760	12, 158, 318
Pork (fresh and pickled)	11, 448, 858	667, 074
Lard	187, 510, 210	10, 790, 156

¹ See number and value of hogs elsewhere in this volume.

While we send to the United Kingdom more pounds of bacon than of any other pork product, the United States is referred to as England's principal source of *cheap* bacon. Denmark holds the market for the high-priced imported bacon. If we send to that country cheap meat, it is surely our own fault, and one which might easily be corrected. There is no reason why the United States should not prepare bacon equal to the best, and we must do so if we are to extend our markets and are to strive successfully for top prices. Secretary Morton, in his report for 1894, emphasizes this fact. He says: "While the price obtained for Danish bacon is \$14.18 per hundredweight (112 pounds), that obtained for bacon from the United States is only \$9.72 per hundredweight. In other words, if the quality of the American bacon offered for sale in the British markets had been as well adapted to the taste of the British consumers as the Danish, American bacon would have realized \$28,192,300, instead of \$19,357,376, which it did actually realize."

An English product known as Wiltshire bacon is recognized throughout Europe as the standard brand. It commands even a higher price than Danish bacon. The manufacturers demand lean pigs varying in weight from 130 to 190 pounds. This character of animal, with the method of curing, has given the Wiltshire bacon the top of the market wherever it may be obtained at all. On this point Secretary Morton further wrote in his report for 1894: "A knowledge of the methods which they pursue to maintain their goods in public esteem is in the highest degree valuable to the American packers and farmers. The fact is demonstrated that the bacon which commands the best price in the English market is a lean and not oversalted meat. In view of that fact it is of interest to American producers to place themselves in a position to cater especially for a market which demands so much of this peculiarly fattened and particularly cured commodity."

An article on "Bacon curing," by Mr. Loudon M. Douglas, published in the Journal of the Royal Agricultural Society of England, has such practical bearing upon the industry that it is deemed wise to insert here a part of it. Inasmuch as the United States proposes to prepare bacon for the same market that Mr. Douglas advocates, there will be found in his article many valuable hints which our people would do well to heed. The article has five chapters, namely: I. Pig and bacon statistics; II. The formation of bacon-curing companies, etc.; III. The equipment of a modern bacon factory; IV. Modern bacon and ham curing; V. The various forms and cuts of English bacon and hams. Chapters II, III, and IV follow herewith:

THE FORMATION OF BACON-CURING COMPANIES.

The Danish farmers' cooperative societies are the best models for British farmers to follow in forming similar limited companies. It will be remembered that the great expansion of the Danish trade in bacon began at about the same time as the

farmers' societies were formed for the purpose of constructing factories for bacon curing. The first of these factories was established in 1887 at Horsens, under the able directorship of Mr. Paul Norgaard (now joint proprietor of Holstebro Svineslagteri and others). This factory was the means of teaching the farmers what they could do for themselves, with the consequence that, since that date, the whole of Denmark has become dotted over with bacon factories. The number, as has been stated, is forty-one; and in all likelihood this total will yet be added to, in spite of the apparent falling off in the supply of hogs.

Most of these bacon factories now make provision for the slaughtering of cattle as well as hogs. The cattle carcasses are largely exported, in sides, to London and Hamburg, and it is thought that the trade may become a remunerative one in conjunction with the bacon business.

It has been the author's privilege to visit most of the bacon factories in Europe, and he is in a position to testify to the splendid organization of the Danish farmers and their successful manner of conducting these factories. The factories themselves are models of economic construction, and are generally under the directorship of an able manager, skilled in all the details of the business. Cleanliness and economy seem to be the rule everywhere.

The manner of forming a farmers' association for the purpose of carrying on a bacon-curing business may be briefly described, as it has already been done in the author's "Receipt Book" and elsewhere, as follows:

"The funds for the erection of the necessary buildings were generally derived from a loan effected on the security of the founders, each member being expected to become a guarantor for an amount not exceeding £50, the sum guaranteed by each individual determining the extent of his ownership in the concern.

"The administration of the association is vested in a council elected by the members. The employees usually consist of a manager, a bookkeeper, and a cashier. The regulations of the different cooperative bacon factories agree very much in their general principles. It is usually stipulated that the members of the association shall deliver all their salable swine to the factory for a period of seven years, except in the case of removal from the district. This stipulation, however, does not apply to boars, sows in farrow, or to young pigs under 56 pounds (in some cases 112 pounds) live weight, nor does it extend to pigs sold by a member to his laborers or consumed in his own house. A corresponding obligation is nearly always imposed on the association to accept all the healthy swine consigned by a member to the factory. A member may purchase any number of pigs from another member of the association and send them to the factory, provided he has fattened them for a period varying from twenty to thirty days before delivery; but he is not allowed to send in one year more than ten pigs purchased from nonmembers.

"The association usually defrays the expenses incurred in conveying the swine from the nearest railway station to the factory; all other charges for carriage are paid by the consignors. On removal to the factory, the pigs are divided into classes according to quality, the values of the different classes being fixed weekly by the council on the advice of the manager. In some cases the prices are paid by dead weight, but in the older establishments payment by live weight is still in practice. The offal is generally sold to the members of the association or to the general public at the current prices of the day. The regulations do not, as a rule, contain any restrictions on the methods of feeding swine intended for the factories. Sometimes, however, the employment of fish and fish cake is prohibited, as is also the use of a ration containing more than 50 per cent of maize. Whenever it is found that the supply of swine is falling off, the manager of the factory is empowered to purchase pigs from nonmembers of the association at a price fixed weekly by the council and posted up for the information of members.

"At the close of the year the profits arising from the operations of the association are distributed among the members, after provision has been made for the payment of the working expenses, the allocation of a certain sum to the reserve fund, and the part repayment of loans. Each member receives a share of the profits in proportion to the weight of pork he has delivered during the year. The amount carried to the reserve fund is determined annually by the council. In some of the Danish cooperative bacon factories it is the practice to elect the members of the council as representatives of the members residing in different parishes. Thus, in the rules of the Esbjerg factory, it is provided that any parish in which ten members of the association reside may be represented by a delegate on the council. The president is chosen by the council from among themselves."

Of late the question has been discussed at meetings of the directors of the various factories whether it would not be better to amalgamate the whole of the factories and have one general sale office in London. At the present time the bacon is distributed by agents who are principally located in Hibernia and Wellington Chambers, London Bridge. These agents, of whom there is a considerable number, get 3 per cent for selling the bacon, and for this percentage they take all risks of bad debts. The bacon is consigned to the agents as it becomes ready, and it is their duty to obtain the best price they can for it. This price, less expenses of landing, storing, telegrams, commission, etc., is remitted at once to the factories.

In England it is possible that a modification of the Danish scheme might be successfully carried out. The one thing necessary would be that the farmers should guarantee so many pigs per annum. The difficulty would be the regular supply of pigs, but this difficulty could be got over by arrangements. Let it be clearly understood that the factories will take all pigs offered at prices fixed by responsible shareholders. Let the factories distribute in various districts well-bred boars free, and so encourage the breeding of good pigs, and there seems little doubt but that success would follow any well-considered scheme. The nearest approach to anything like a farmers' factory in England is the factory now being constructed for the Yorkshire Bacon-Curing Company, Limited, at Selby, Yorks. The idea of this factory was conceived by Mr. H. L. Chown, agent of the Earl of Lonsborough, upon whose estate the factory is situated. It was intended primarily to help the farmers on his lordship's estates, and there is very little doubt but that great success awaits it.

Some of the more important features of the prospectus of the Yorkshire Bacon-curing Company, Limited, may be with advantage reproduced here, as serving to show the lines which might be followed in the origination of similar concerns. The capital was 35,000 ordinary shares of £1 each, of which 20,000 were offered for subscription at par on June 10, 1897, the date of publication of the prospectus:

"1. This company has been formed to acquire freehold land at Selby, in the West Riding of Yorkshire, and to erect and equip thereon a factory for curing bacon in the 'Wiltshire' style, and for the production of real 'York' hams. The want of such a factory for a home industry, and the production of an article which is in everyday use, has been long felt. Yorkshire, the largest pig-producing county in the United Kingdom, is still without the means to manufacture the celebrated hams which are sold throughout this country and abroad as prime York hams. The deservedly high reputation of York hams is in itself a species of good will, and the directors, with other gentlemen in the neighborhood interested in agriculture, have associated themselves together with the object of promoting this industry in Yorkshire, so that some portion of the profits derived therefrom may be retained in the county from which the hams take their name.

"2. The demand for mild-cured bacon and York hams is very extensive, but for the production of these it is necessary to have a factory fitted up with the most modern appliances in general use in Wiltshire, Ireland, and Denmark. The

new factory will be so equipped, and it is expected will be in operation in December, 1897.

"4. In connection with the bacon-curing industry there are a considerable quantity of by-products, which are worked up into sausages, brawn, potted meats, polonies, etc., and no better market exists for these than the populous industrial centers of Yorkshire, all of which are within easy reach of Selby.

"5. Selby is exceptionally well situated as a center for the bacon and ham-curing industry, being on the main east and west line on the Northeastern Railway between Leeds and Hull at the point where it is intersected by the north and south line between London and Scotland. It is served by the London and Northwestern, the Great Eastern, the Great Northern, and Northeastern companies, and, owing to the water competition, the rates for carriage of produce to the large manufacturing towns of Yorkshire are exceptionally low. The town is situated on the west bank of the river Ouse, which is navigable to vessels of 350 tons. There is also, by means of a branch of the Aire and Calder Canal, direct water communication with the neighboring colliery districts and the West Riding and Lancashire. The surrounding district is exceptionally well stocked with pigs. The board of agriculture states that within a radius of 15 miles of Selby there were 36,752 in June, 1896 (the last census taken). The total number of pigs alive in Yorkshire, as returned by the board of agriculture on June 4, 1896, was as follows: East Riding, 62,551; North Riding, 59,735; West Riding, 101,808; total, 224,094.

"6. The estimate of profits has been carefully made upon expert advice. The factory has been designed with a view to expansion, but it is computed that a moderate estimate of the trade to be done from the commencement of the enterprise is an average of 300 pigs per week, and after providing for all expenses in connection with the factory, including depreciation of buildings, machinery, etc., leaves an average net profit of 5s. per pig. This would yield £3,900 per annum, a very remunerative return, £2,000 being equal to 10 per cent upon the capital called up. The saving in carriage alone on 3,000 pigs per week by the manufacture at Selby would amount to over £1,000 per annum.

"7. The directors are in a position to state that the services of a thoroughly competent and experienced manager can be secured.

"8. The following is a report by Mr. London M. Douglas, of the firm of William Douglas & Sons, Bacon Factory Engineers, 29 Farrington Road, London, E. C., to which is added an independent report obtained by Messrs. Douglas from a practical bacon factory manager:

MARCH 24, 1897.

The first thing to be considered in the promotion of an industry such as bacon curing is the supply of pigs. Yorkshire is the largest producing county in the United Kingdom. The figures for the year 1896, as obtained from the board of agriculture, show the total number of pigs alive on June 4 was 224,094.

The only county that comes any way near this large total is Suffolk, with 165,636; all other counties are very far behind. It seems rather anomalous that amid this great produce there should be no bacon or ham factories. There are, of course, numbers of pork purveyors, who do a lucrative business in their own special way, but the factory proper, as known to other parts of England, especially the west, is wholly unknown in the county of York. From time immemorial the name of "York" hams has been synonymous with a high-class product, and on the Continent at the present day hams sold under that name may be met with in thousands, particularly in France. It is safe to say that few, if any, of these ever saw Yorkshire, and, indeed, it is common knowledge that most of them are prepared in the great factories of Ireland. It seems, therefore, reasonable to suppose that, so far as hams are concerned, no difficulties would arise in disposing of them. The same remark applies to bacon. The modern method of curing bacon as "mild cure" is unknown in Yorkshire, and the small curers there still adhere to the obsolete method, by which the meat is overcharged with salt and not only made unpalatable, but in many districts practically unsalable. The introduction of the modern way of curing would very speedily cause the demand for

York bacon and hams to bound up enormously. Selby as a center seems well suited for the proposed factory, as it is on the main line north and south and within easy access to a great many large and flourishing industrial centers. The importance of situation can not be too much amplified, as the fact of being near to large centers of population is itself a warranty of the easy disposal of the offal. The requisite conditions in starting a bacon factory are as follows:

- (1) An ample supply of pigs.
- (2) A site where there is plenty of water and a railway.
- (3) Sufficiency of capital.
- (4) A competent manager.

A fairly large factory would be one to handle about 300 pigs per week, and this is only 15,600 per annum, or, roughly speaking, one-fourteenth of the available supply.

"Messrs. Douglas have obtained the following report from a thoroughly practical bacon-factory manager, on whom they can rely:

MARCH 17, 1897.

With reference to your letter as to a proposed bacon factory at Selby, I find that you are quite right as to the very large supply of pigs in Yorkshire. I had no idea of its being so large until I looked it up, and my only wonder now is that a bacon factory or factories have not been started there before, especially as York hams have a long-established name in London and on the Continent. On looking at the position of Selby on the map, I find that it is situated in a most advantageous point for the distribution of goods, having a good communication with London and being also within about 60 miles of the following large towns, having populations as under:

Manchester and Salford	740, 268	Burnley	102, 805
Leeds	402, 449	Huddersfield	100, 463
Sheffield	347, 278	Halifax	94, 775
Bradford	228, 809	York	67, 004
Hull	220, 844		
Oldham	143, 442	Total	2, 568, 517
Bolton	120, 380		

not to mention the numerous smaller towns. This district is one of the largest bacon consuming parts of England, and a very large proportion of the bacon produced by the west of England and Wiltshire factories is sent there to be disposed of, costing them on an average about 50s. per ton for freight; and as the freight for, say, 60 miles round Selby as charged by the Northeastern Railway Company would not average more than 10s. to 20s. per ton, the saving on freight alone would amount to a very large item indeed.

This is also a splendid district for the sausage trade, which is a most lucrative business, also for disposing of the offals, cuttings, plucks, etc., in the surrounding large towns at good prices. A depot might also be arranged for collecting agricultural produce, such as butter, eggs, poultry, etc.

A modern bacon factory is a place which is devoted to the manufacture of bacon as its first business. There are subsidiary businesses which may be, and are, generally carried on in bacon factories, such as sausage making, pork-pie making, etc. But the distinction must be clearly drawn, on the foregoing lines, between a bacon factory proper and an ordinary pork-selling business. There are many thousands of the latter in England, but these places could not be correctly described as bacon factories.

Bacon factories proper are situated at the following places in England:

Redruth, Cornwall.	Stroud, Gloucestershire.
Highbridge, Somerset.	Oxford, Oxfordshire.
Calne, Wiltshire.	Reading, Berkshire.
Chippenham, Wiltshire.	Andover, Hampshire.
Trowbridge, Wiltshire.	Wroxall, Isle of Wight.
Malmesbury, Wiltshire.	Needham Market, Suffolk.
Gillingham, Dorset.	East Dereham, Norfolk.
Cirencester, Gloucestershire.	Birmingham, Warwick (four factories).
Nailsworth, Gloucestershire.	Selby, Yorks.
Bristol, Gloucester (four factories).	Carlisle, Cumberland.

The total output of these factories is a fraction only of the consumption of bacon. English-cured bacon commands still a much higher price than any foreign-cured meats, and, so long as attention is given to the breeding of the pigs, so long will that advantageous state of things exist. There seems, therefore, every prospect of success awaiting factories which may be started in the future.

This is a matter for earnest consideration of all agricultural societies, and the sooner they recognize its vast importance the sooner will better profits from agriculture be obtained.

* * * * *

Among the points to be considered in establishing a bacon factory are the following:

- (1) The supply of bacon pigs.
- (2) The facilities for transport.
- (3) The water supply (it must be good).
- (4) Easy access to populous districts so as to get rid of offal at a profit.

The bacon factories in England, it is curious to state, lie mostly in the south. In fact, a straight line drawn from the mouth of the Thames to that of the Severn would cut off most of them. The reason of this is not quite clear. It certainly does not lie in the supply of pigs, as the Wiltshire factories do not get their supplies in that county. Owing to the good cross-channel service, a large proportion of the pigs for "Wiltshire" bacon are brought from Ireland. Of course, in addition to that source of supply, there are the adjoining counties. The real reason is, doubtless, the energetic enterprise of the owners of these bacon factories.

THE EQUIPMENT OF A MODERN BACON FACTORY.

The modern method of curing is very simple. It is dependent to a large extent upon mechanical appliances of various kinds in the first place, and on the use of salt and other preservatives in the curing process. Time was when farm-cured bacon of a very coarse quality was made, to a large extent, all over the United Kingdom. The curing of such meat has, however, almost ceased within late years, although in some of the remote districts it is still carried on. The fatal objection to farm-cured meat is that it can not be produced except in a very salt state, and the taste for such meat is becoming rarer since modern processes for producing mild-cured meats were introduced. A modern factory consists of a building suitably separated into departments and so arranged that there will be no loss of labor. The main departments may be set down as—

Slaughtering house.	Boiler house.
Dressing room.	Smoke house.
Chill room.	Baling loft.
Cellar.	Offices.
Engine and refrigerator rooms.	

The subsidiary department consists of—

Sausage department.	Lard-refining department.
Pie department.	Bone digesting and grinding department.
Canning department.	

There are many appliances, some of them of an ingenious character, placed in these various departments. First in importance is the refrigerating machinery, without which a modern bacon-curing factory would be incomplete. There are many systems of refrigeration, but few lend themselves to the purposes of a bacon factory, inasmuch as besides requiring a circulation of air in the chill rooms it is indispensable to have a large amount of "cold" stored. Two gases are used as

refrigerants, viz, ammonia and carbonic acid. Ammonia is objectionable, because of its smell and dangerous properties, and would not seem to be so adaptable to the purposes of a bacon factory as carbonic acid (carbon dioxide). Carbonic acid has no smell, and it is capable of being used in a machine to which a safety valve is attached. The other appliances to which special consideration must be given are the singeing stack (which should be of the vertical type), the pickle pump, and the lard appliances.

It would be of very little present interest to detail here all the appliances necessary to a modern factory; suffice it to say that the equipment of factories may be accomplished for a small sum, which may rise to very large amounts according to the work to be done. As a guide it may be useful to state that factories may be built and equipped for the undernoted sums, excluding price of land:

A factory to handle, say—

50 pigs per week, about	£700
100 pigs per week, about	1,500
300 pigs per week, about	5,000
500 to 1,000 pigs per week, about	12,000
1,000 to 2,000 pigs per week, about	15,000

These estimates are based upon work actually done. The figures bear no relation to one another, as it depends very much on local conditions as to levels, etc., what the cost may be.

MODERN BACON AND HAM CURING.

The great strides made in the business of bacon curing during recent years and the constant developments that are taking place render it necessary that from time to time the process of curing, as modified and brought up to date, should be described in some periodical accessible to everyone.

The process of curing is simple enough, consisting as it does for the most part of adding preserving substances to the meat and allowing time for such materials to saturate the tissues. This preserving process checks the development of bacteria, and renders it possible to keep bacon and other meats similarly treated for an indefinite period.

For the purpose of slaughtering and preparing the animals for the cellars, the pigs are hoisted by means of a friction hoist driven from the main driving shaft of the factory, by one of the hind legs, to an overhead bar. The moment they reach this bar the slaughterman passes a sharp knife quickly into the neck through the jugular vein, and in the direction of the heart, but withdraws it instantly. The pigs bleed quickly and suffer very little pain. They are immediately pushed along the track bar to the bleeding passage, and are allowed to hang till all the blood has flowed from them. They are then flung on a dumping table and the leg chains are removed. They are at once rolled into a scalding vat, nearly filled with water at 180° F. The carcasses are rolled in this vat until the hair and bristles come away easily in the hands. They are then hoisted by means of a "cradle" onto a scuttling table, where the remains of the hair and bristles are removed by means of bell-shaped scrapers. They are next swung by an oblique board onto the track bar again, and are brought to the singeing furnace, in which they are singed for about a quarter of a minute, lowered again to the track bar, and plunged into a cold bath, from which they are immediately hoisted to the track bar again, and while sprays of cold water are playing upon the carcasses the latter are scraped by means of flat hand scrapers free from the burnt surface. The intestines and offal are then removed and sorted in various departments, and the carcasses, after again being cleansed, are split down the back, the vertebral column removed, and the two sides, including the vertebral column, the head, the feet,

and the flick lard, or kidney fat, are weighed. This is what is known as "dead weight," or the weight upon which payment is made (the dead weight of a hog weighing alive 16 stones would be 12 stones). From the dead weight it is the universal custom to deduct 2 pounds per side for beamage,¹ and the price then is the price of the net weight. After the weight is ascertained the head and fore feet are completely severed, the kidney fat and vertebral column are removed, and the sides are disconnected and allowed to cool in the hanging house for a period of from six to twelve hours, according to the time of year. They are then placed in a chill room for about twelve hours, until the meat registers on a meat-testing thermometer 40° F. This temperature is obtained by keeping the chill rooms at 38° F. The blade bones are now removed and the sides trimmed and taken to the cellars.

Wiltshire bacon.—On being taken to the cellars the sides are laid on a bench and pumped at a uniform pressure of about 40 pounds per square inch, at the places indicated in fig. 18, with a pickle made from the formula—

	Pounds.
Salt	50
Granulated saltpeter	5
Dry antiseptic ²	5
Cane sugar (in winter only)	5

To this add 20 gallons of water and stir till all the material is dissolved. The strength, as shown by the salinometer, should be about 95°. If such is not indicated, add salt and stir until it is.

A mixture of equal quantities of saltpeter and dry antiseptic having been previously prepared, the sides are first wiped with a portion of the pickle used for pumping and are then laid on the cellar floor. Some of the mixture of dry antiseptic and saltpeter is next sprinkled over the whole of the inside or cut surfaces. The quantity is usually just sufficient to slightly cover the whole (a sieve being very useful for the purpose of distribution). Salt finely ground is now sprinkled all over the same surface, and the side is permitted to lie in that condition for seven or eight days, when it will be cured, and may then be washed and baled for transport, or the sides may be washed and dried as "pale-dried bacon," or they may be smoked and sold as smoked bacon. Where space is of value the bacon is "stacked" or "piled."

The most important part of the foregoing description is that referring to the pumping. The diagram (fig. 18) is designed to show the various portions into which the side will ultimately be divided, and at the same time to indicate the precise place and direction in which the needle of the pickle pump should be inserted. This diagram has been constructed with the assistance of those well skilled in the matter, and will doubtless serve a permanent purpose.

The process of producing "Wiltshire" bacon, which has just been described, applies practically to all other kinds. The names of different cuts are very many, and depend on the local habit of cutting portions of a side in a peculiar way. Perhaps the greatest rival of Wiltshire bacon is that produced in Cumberland; but the liking for Cumberland bacon is an acquired taste. It is highly charged

¹ "Beamage" is the deduction made in weighing pigs warm. The moisture which evaporates before the flesh becomes rigid is estimated at 2 pounds per side, or 4 pounds per pig all over. It is the universal custom for bacon curers to deduct this amount.

² "Dry antiseptic" consists of boracic acid neutralized with borax. The mixture is dried and concentrated at a high temperature. At the same time chemical combination takes place, and the resulting compound is nearly three and one-half times as soluble in water as boracic acid. Dry antiseptic is now a regular article of commerce, and can be readily purchased.

with salt, as a rule, owing to the primitive methods in use where it is produced. These old-fashioned ways will have to go and give place to the modern methods; or, if not so, it is safe to say that Cumberland bacon will become a thing of the past.

When the bacon has been cured, it is, as a rule, washed free from salt on the surface, and from slime, if any, and allowed to drain. If it should be wanted in the "green" state, it is simply sent out as it is, in bales, wrapped in canvas. If wanted in the "pale-dried" state, the sides are hung up in a ventilated drying room, heated to a temperature of 80° F. with steam pipes, and kept there until quite dry. "Smoked bacon" is produced by hanging the sides in a smoke store for about three days, where it is exposed to the smoke and fumes given off by smoldering hardwood sawdust. The ventilation of the smoke stores is a very important matter. When the sides are sufficiently smoked or dried, as the case may be, they are allowed to cool in the packing loft, after which they are weighed and baled for the market.

Hams.—A somewhat different process is used in the curing of hams, although in principle it is the same. The hams are cut according to the particular description wanted after the sides have been chilled. They are then flung into a pickle tank, filled with pickle made according to the formula already given. They are allowed to remain there until next morning, when they are taken out and pressed so that the blood may be cleared out of the blood vein. The object of putting them into the pickle is to purge this blood away. They are next laid in beds of salt, care being taken to have the shanks pointing downward. They may be pumped or not, according to the taste of the curer. The author's experience goes to show that it is wise to pump the blood vein with an antiseptic pickle at a low pressure. The same mixture of antiseptic and saltpeter is sprinkled over the cut surfaces, and the whole is covered with salt. At the end of three days the hams are taken up and pressed again so as to remove any blood that may have remained in the blood vein. They are then laid down and covered with fine salt, and are left in this position for about fifteen days. A very good rule applying to hams is that they require a day for every pound weight to cure.

Matured bacon and hams.—The foregoing description of curing refers exclusively to meats meant for immediate consumption. The keeping of meat for a year or so requires a rather different treatment. The time in salt has to be extended for about a week in either case, and the hams or bacon require to be dried.

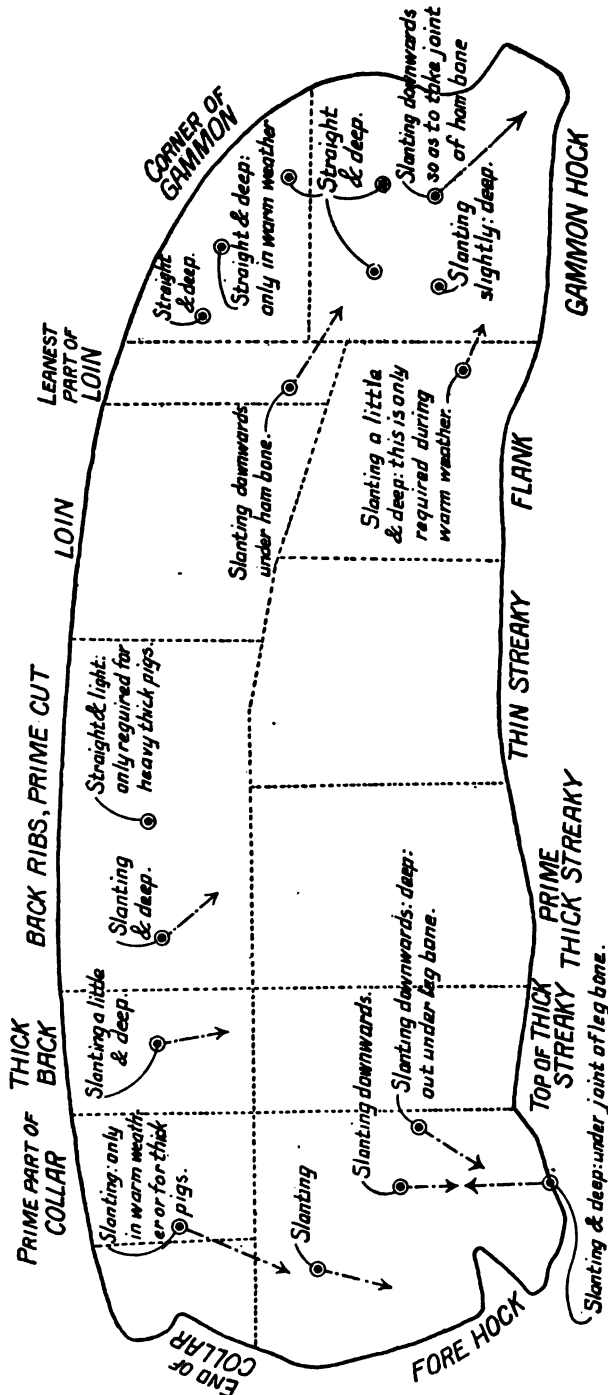


FIG. 18.—Diagram showing places where needle of pickle pump should be inserted in pumping a side of bacon; and the direction (shown by the arrows) in which the needle should be thrust.

SHEEP SCAB: ITS NATURE AND TREATMENT.

By D. E. SALMON, D. V. M., AND CH. WARDELL STILES, PH. D.,
Chief and Zoologist of the Bureau of Animal Industry.

HISTORICAL INTRODUCTION.

The disease commonly called sheep scab is the mange, or scabies, of the sheep. It is a contagious skin disease caused by a parasitic mite. This disease is one of the oldest known, most prevalent, and most injurious maladies which affects this species of animals. It has been well known for many centuries, and references to it are found in the earlier writings, including the Bible, where we find, in Leviticus xxii: 22, the use of scabbed sheep forbidden in sacrifices. Some think that the mite which causes the disease was known to Aristotle, 322 B. C.; but it appears that Wichmann, writing in 1786, was one of the first authors of modern times to suspect that sheep scab was of the same nature as the scabies of man. Wichmann held the erroneous view, however, that both diseases were produced by the same parasite.

The prevailing opinion concerning scab prior to and during the first years of the present century was that it was caused by some special condition of the sheep's system, a "humor of the blood," which led to a skin eruption. The parasites were in some cases known and recognized, but they were supposed to be either an accidental occurrence or to have arisen by spontaneous generation as a result of the disease, and because the affected skin offered conditions favorable to their development and existence.

As a result of diligent research certain investigators reached the conclusion that the malady was due directly to the mites which were found inhabiting the diseased parts of the skin. Their opinion was not at once adopted, however, but, on the contrary, met with strong opposition from those who held that scab was due to a diseased condition of the blood and from others who held a modified view to the effect that the mites carried poisonous or diseased material from one animal to another and in that manner communicated the disease. The errors and uncertainties which came down to us through centuries of controversy were finally and for all time dispelled by conclusive experiments upon animals made during the first half of this century. It was shown that scab does not develop and can not be produced without the parasites. The complete life cycle of the mites was

studied and demonstrated from the eggs to the adult parasites. It was shown that mites are always the offspring of ancestors, the same as are the larger animals, and it has in later years come to be admitted that there is no such thing known as spontaneous generation of any living thing under any circumstances. The demonstration was repeatedly made that the disease always developed if mites were taken from diseased sheep and placed upon healthy ones, and that diseases of the skin resembling scab are not contagious unless the mite is present.

Questions are still frequently asked, by persons not conversant with the investigations of the subject, as to whether the scab is the cause of the mite or the mite is the cause of the scab, and also whether the disease can develop without the presence of the scab mite. The investigations which have been referred to answer these questions and also show that the treatment must consist in external applications for the destruction of the parasites and not internal remedies to "purify the blood."

Is scab hereditary?—An impression has arisen among some sheep raisers that scab is hereditary. This impression is, however, erroneous. Scab is no more hereditary than are sheep ticks or sheep lice, for the parasites which cause it live on the external surface of the body and do not reach the womb. It is possible, however, for a lamb to become infected from a scabby mother at the moment of birth or immediately after. Lambs are occasionally born with white spots on their skin, and this possibly has given rise to the idea that scab is hereditary.

LOSSES CAUSED BY SCAB.

Losses in home industry.—The losses from sheep scab have been and are still very severe in most sheep-raising countries. They are due to the shedding of the wool, the loss of condition, and the death of the sheep.

Although laws were made for the control of the disease as early as the beginning of the eleventh century, general ignorance in regard to its nature and proper treatment has prevented the successful administration of such laws even to the present day. The disease exists in most of the countries of Europe, and also in Asia and Africa, and until recently in Australia. Most civilized countries now control the disease to a certain extent and limit the losses by the enforcement of stringent sanitary regulations; but the extent of its prevalence is nevertheless surprising. It is a disease not difficult to cure and eradicate, and an accurate knowledge of its characteristics with attention to details are all that is needed to secure this result.

In the United States some sections have been overrun with sheep scab, and many persons engaged in the sheep industry have been forced to forsake it because of their losses from this disease. It is

probable that in its destruction of invested capital sheep scab is second only to hog cholera among our animal diseases. The large flocks of the Plains and Rocky Mountain region and the feeding stations farther east have suffered severely and are constantly sending diseased animals to the great stock yards of this country. As a consequence of this marketing of affected sheep, the stock yards are continually infected, and any sheep purchased in these markets are, unless properly dipped, likely to develop the disease after they are taken to the country for feeding or breeding. There is in this way a constant distribution of the contagion, and thousands of persons who know little of its nature or the proper methods of curing it find that they have introduced it upon their premises.

Losses in export trade.—In addition to the direct losses in wool, in flesh, and in the lives of our sheep, we have suffered immensely in our foreign trade because of the prevalence of this disease. Great Britain appears to have been the first country to prohibit live sheep coming from the United States, by an order issued in 1879. Upon representations that there was no foot-and-mouth disease in the United States this order was rescinded in 1892, but only to be again enforced in 1896 on account of the many scabby sheep sent abroad by our exporters. Our sheep are consequently slaughtered on the docks where landed, the market being restricted and the prices much less favorable than would otherwise be obtained. The markets of Continental Europe have been entirely closed to American sheep, as even the privilege of slaughtering at the landing places is denied. For a long time it was impossible to send our pure-bred sheep to Australia, where there is a demand for them for breeding purposes, because the Australian law required them to be transshipped and quarantined in British ports, and the British authorities declined to grant this privilege. Arrangements have since been made for the direct shipment of sheep to Australia, if accompanied by the certificate of a veterinarian appointed by the Australian authorities.

On the whole, it is seen that the existence of this disease in our flocks has prevented the development of our export trade in many directions, and has caused no end of trouble and loss to our exporters.

CAUSE OF SCAB.

Sheep scab is a strictly contagious disease.

Common sort.—Common sheep scab is caused by that species of mites technically known as *Psoroptes communis*.¹ Parasites of this species cause scab in horses, cattle, sheep, goats, and rabbits; but for each of these species of animals there appears to be a distinct variety

¹The technical term *Psoroptes* is derived from the Greek, and means that the mites hide under the crusts. The parasite is sometimes called *Dermatocoptes*, which means that the mites wound the skin. A third name, *Dermatodectes*, indicates that the mites bite the skin.

of this parasite. Although it is more or less difficult to distinguish between these varieties, they differ somewhat in size, and it is found that the *Psoroptes communis* of the sheep does not cause scab of the horse, ox, or rabbit; nor, on the other hand, does the *Psoroptes communis* of the horse, ox, or rabbit cause scab of the sheep. Naturalists, therefore, distinguish the parasite of sheep scab by the name *Psoroptes communis* var. *ovis*.¹

The parasite of this disease is one of the larger mites, and is quite easily seen with the naked eye. The adult female is about one-fortieth

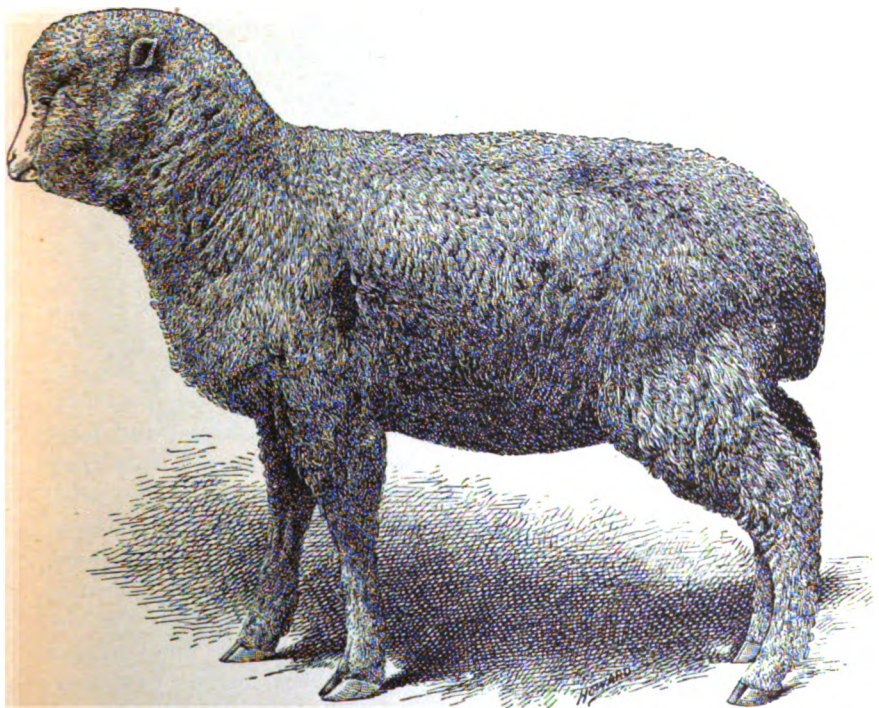


FIG. 19.—A comparatively early case of common scab, showing a bare spot and a tagging of the wool.

inch long and one-sixtieth inch broad; the male is one-fiftieth inch long and one-eightieth inch broad. These mites are discovered more readily and more clearly on a dark than on a light background, and for that reason the crusts from the affected skin are often placed upon black paper and kept in the sunshine for a few minutes in order to reveal the parasites crawling about.

The psoropt inhabits the regions on the surface of the body which are most thickly covered with wool; that is, the back, the sides, the rump, and the shoulders. It is the most serious in its effects upon

¹ Var. is the abbreviation of the Latin word *varietas*, meaning variety.

sheep of any of the parasitic mites, and it is the cause of the true body scab.

Other forms.—Sheep are also affected with three other forms of scab, likewise caused by parasitic mites. One of these is the sarcoptic scab (head scab, or black muzzle), which is limited almost entirely to the head, and is caused by the mite known as the *Sarcoptes scabiei* var. *ovis*.¹ The second is the symbiotic scab (foot scab), which affects the limbs, scrotum, and udder, and is caused by the *Chorioptes communis* var. *ovis*.² Lastly may be mentioned an extremely rare affection, the so-called follicular, or demodectic, scab, affecting the eyelids, caused by a mite known as *Demodex folliculorum* var. *ovis*.³

The sarcoptic, symbiotic, and demodectic forms of scab are with sheep mild diseases compared with common scab, and appear to be rather rare.

DESCRIPTION OF SHEEP SCAB.

(1) COMMON SCAB, BODY SCAB, OR PSOROPTIC SCAB.

Although the symptoms of common scab are familiar to most farmers, they will here be briefly reviewed.

The mites of common, or body, scab—that is, the *Psoroptes*—prick the skin of the animal to obtain their food, and probably insert a poisonous saliva in the wound. Their bites are followed by intense itching, with irritation, formation of papules, inflammation, exudation of serum, and the formation of crusts, or scabs, under and near the edge of which the parasites live. As the parasites multiply they seek the more healthy parts, spreading from the edges of the scab already formed, thus extending the disease. The sheep are restless; they scratch and bite themselves, and rub against posts, fences, stones, or against other members of the flock. This irritation is particularly noticeable after the animals have been driven, for the itching is more intense when the sheep become heated. The changes in the skin naturally result in a falling of the wool; at first slender “tags” are noticed; the fleece assumes the condition known as “flowering;” it looks tufty or matted, and the sheep pulls out portions with its mouth, or leaves tags on the objects against which it rubs. Scabs fall and are replaced by thicker and more adherent crusts. The skin finally becomes more or less bare, parchment-like, greatly thickened, furrowed, and bleeding in the cracks. With shorn sheep especially a thick, dry, parchment-like crust covers the greatly tumified skin. Ewes may abort or bear weak lambs.

Parts of body affected.—When sheep are kept in large numbers the

¹*Sarcoptes*, from the Greek, means that the mites wound the flesh.

²*Chorioptes* signifies that the mites hide in the skin. Another name, *Symbiotes*, signifies that a number of the mites live together; and a third name, *Dermatophagus*, means that the mites eat the skin.

³*Demodex* signifies that the mites have a worm-like body.



FIG. 1. A SLIGHTLY ADVANCED CASE OF COMMON SOAB.

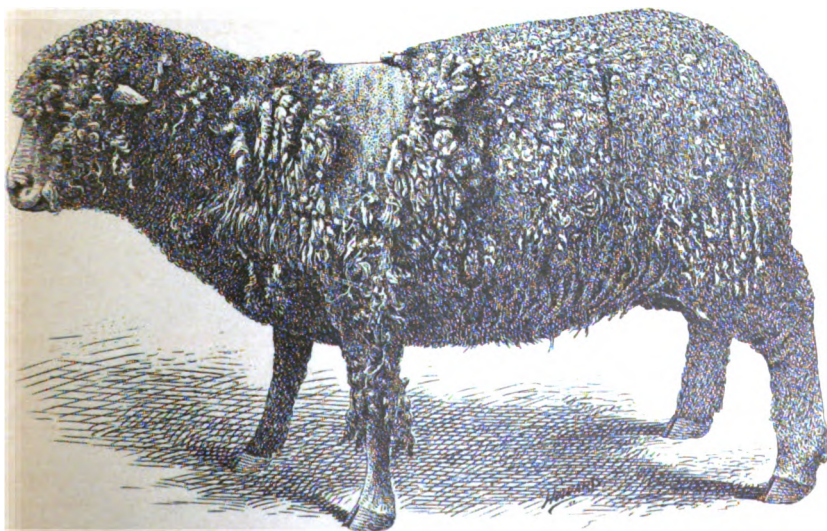


FIG. 2. A MORE ADVANCED CASE OF COMMON SOAB.

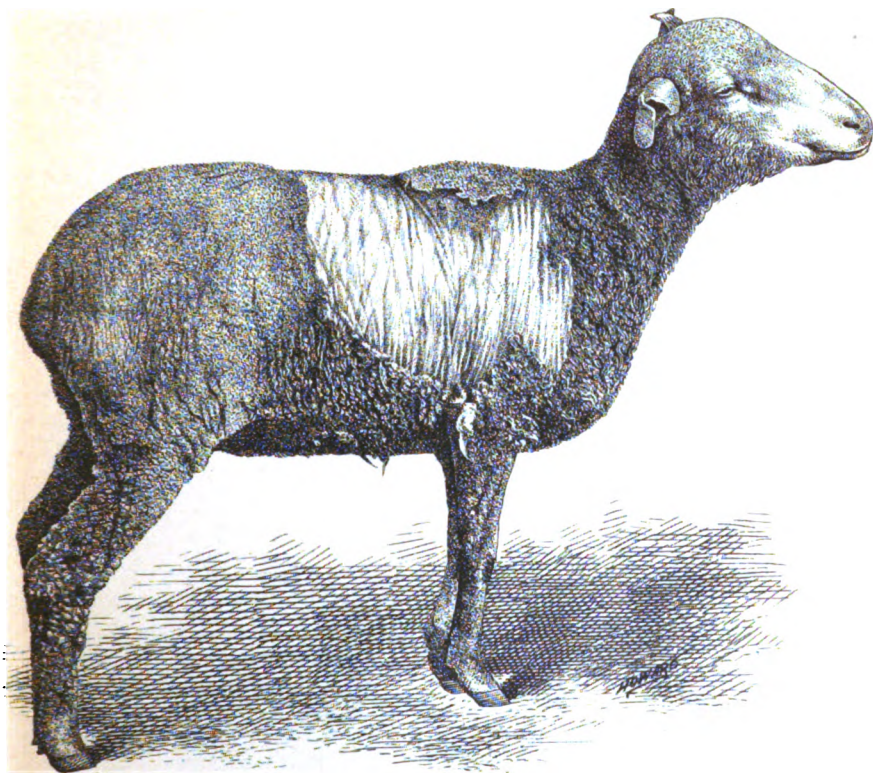


FIG. 3. A SHORN SHEEP WITH LARGE BARE AREA DUE TO SOAB.

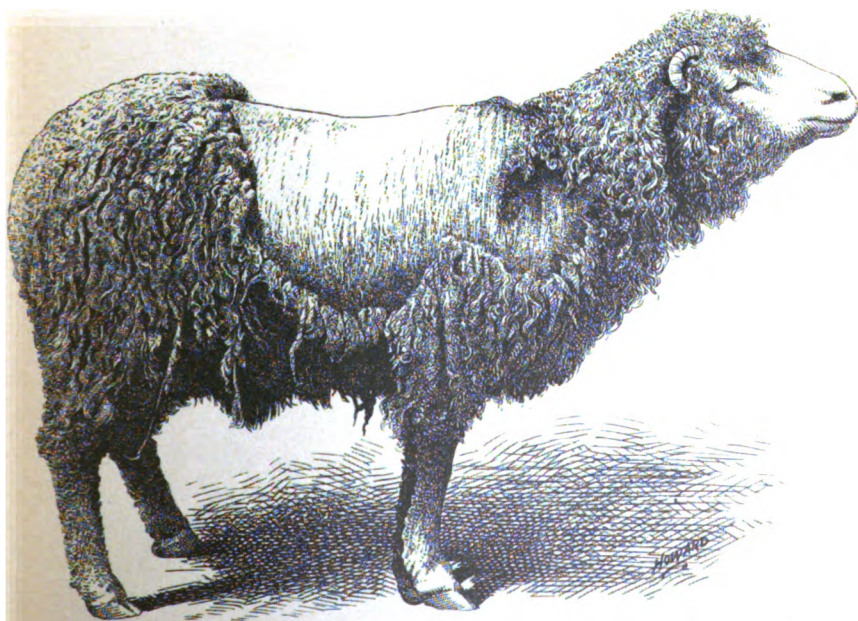


FIG. 4. AN ADVANCED CASE OF COMMON SOAB.

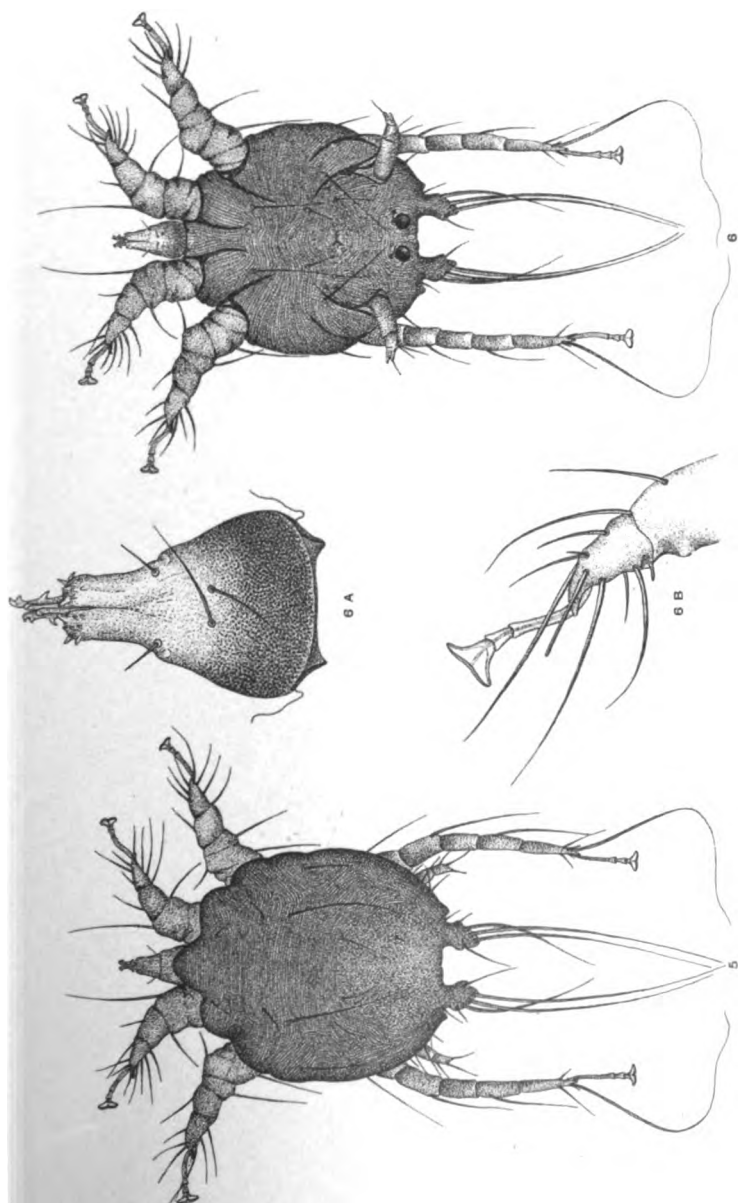


FIG. 5. ADULT MALE PARASITE OF COMMON SHEEP SOAS, DORSAL VIEW. FIG. 6. VENTRAL VIEW OF SAME. FIG. 6 A. HEAD OF FEMALE. FIG. 6 B. LEG OF FEMALE. ALL GREATLY ENLARGED.

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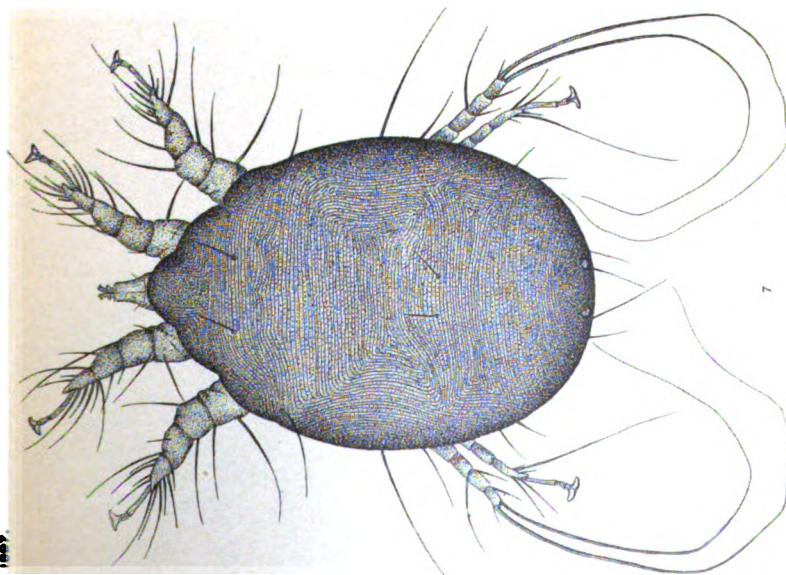


FIG. 7. ADULT FEMALE PARASITE OF COMMON SHEEP SCAB, DORSAL VIEW.

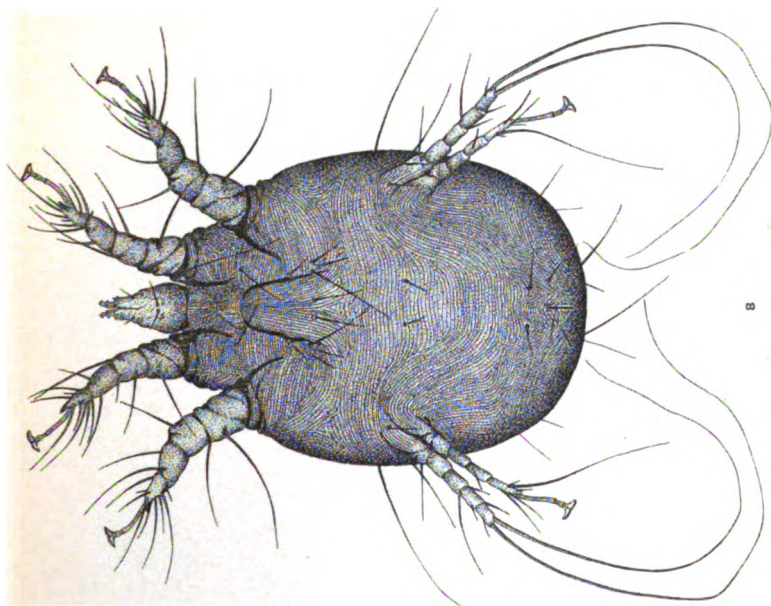


FIG. 8. VENTRAL VIEW OF SAME.

BOTH GREATLY ENLARGED.

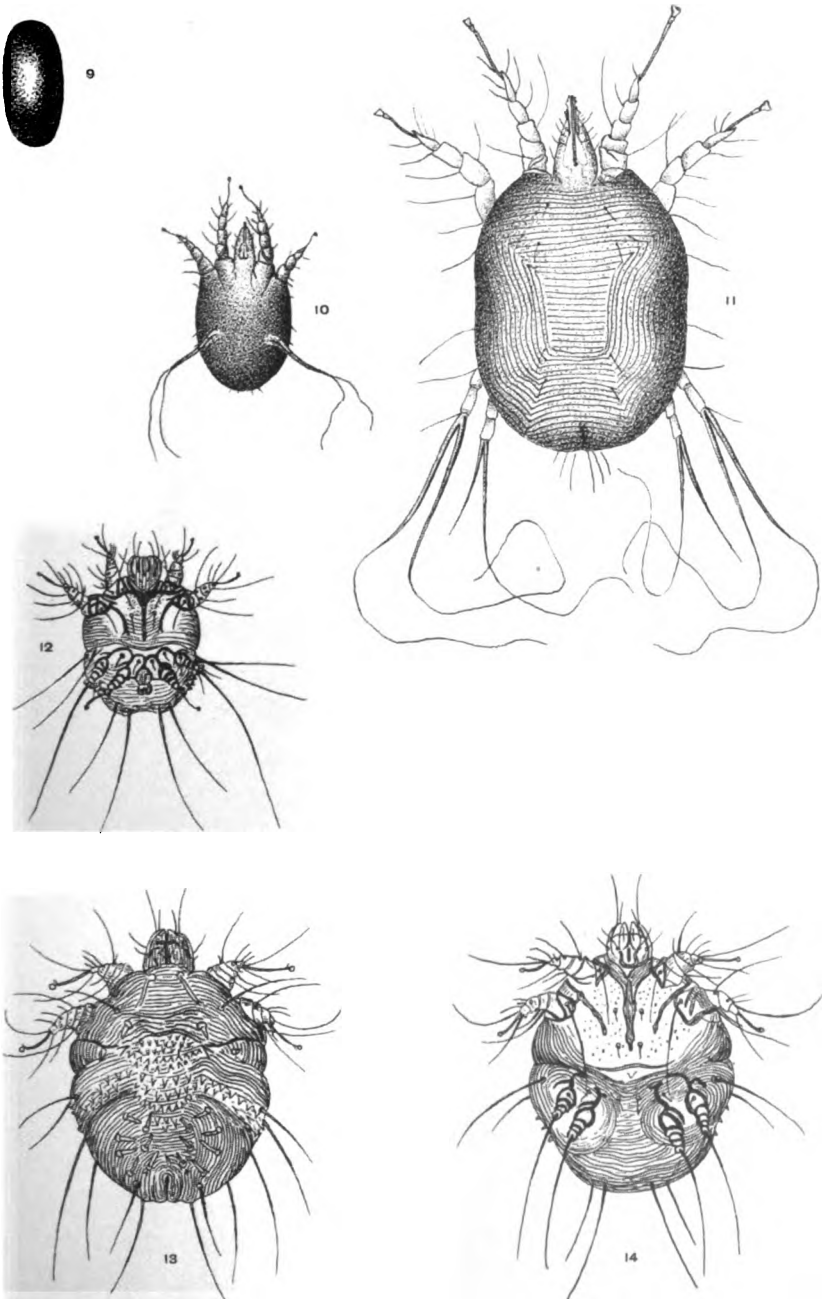
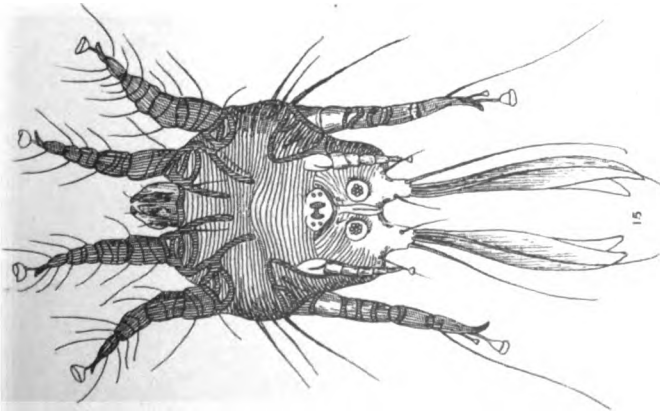
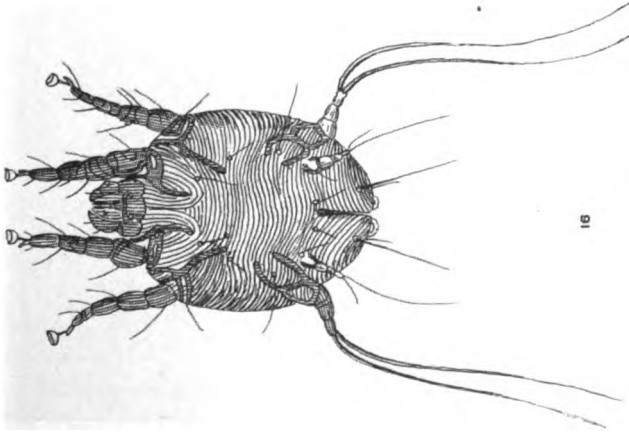


FIG. 9. EGG OF MITE WHICH CAUSES COMMON SHEEP SCAB. FIG. 10. SIX-LEGGED STAGE OF SHEEP SCAB MITE. FIG. 11. YOUNG FEMALE BEFORE MOULTING FOR THE LAST TIME. DORSAL VIEW. FIG. 12. ADULT MALE PARASITE OF SARCOPTIC SCABIES OF MAN. THE CORRESPONDING PARASITE OF SHEEP IS VERY SIMILAR. VENTRAL VIEW, X 250 (AFTER BLANCHARD). FIG. 13. ADULT FEMALE PARASITE OF SARCOPTIC SCABIES, DORSAL VIEW, X 250 (AFTER BLANCHARD). FIG. 14. SAME. VENTRAL VIEW (AFTER BLANCHARD). ALL GREATLY ENLARGED.

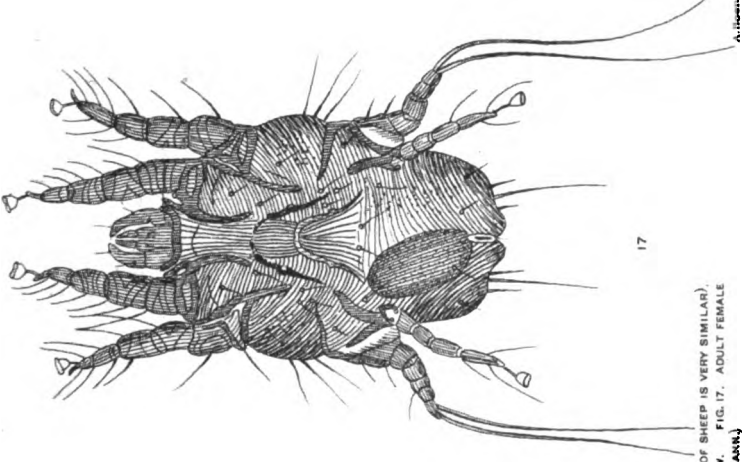
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FIG. 15. ADULT MALE PARASITE OF CHORIOPTID SCABIES OF THE HORSE. (THE CORRESPONDING PARASITE OF SHEEP IS VERY SIMILAR).
VENTRAL VIEW. FIG. 16. YOUNG FEMALE PARASITE OF CHORIOPTID SCABIES. VENTRAL VIEW. FIG. 17. ADULT FEMALE
PARASITE OF CHORIOPTID SCABIES WITH EGG. VENTRAL VIEW. (ALL X 100; AFTER NEUMANN.)

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chances for infection are naturally greater, and the disease may begin on almost any part of the body. Generally, however, it affects the parts which are covered with wool. When the sheep are fat and the wool has a large amount of yolk, the progress of the disease may be slow; usually beginning on the upper part of the body, withers, and back, it extends slowly, but none the less surely and in ever-increasing areas, to the neck, sides, flanks, rump, etc. In two or three months the entire body may be affected.

Contagion.—Common scab is exceedingly contagious from one sheep to another, and may in some cases show itself within about a week after healthy sheep have been exposed to infection. The contagion may be direct, by contact of one sheep with another; or indirect, from tags of wool, or from fences, posts, etc., against which scabby sheep have rubbed, or from the places where the sheep have been "bedded down." One attack of scab does not protect sheep from later attacks. Transmitted to man, sheep scab may produce a slight spot on the skin, a point which is sometimes taken advantage of for the purpose of diagnosis. In case of suspected scab, one of the crusts is bound lightly on the arm. After a short time an itching sensation is felt and the mites are found on the skin. Transmitted to horses, cattle, or goats, common sheep scab fails to develop.

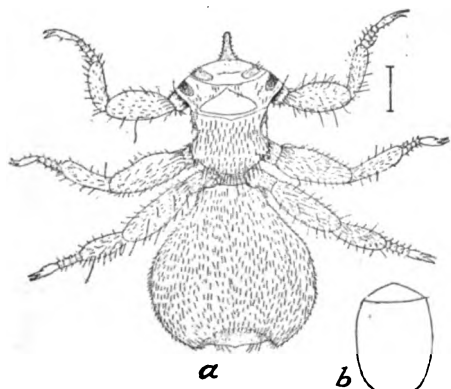


FIG. 20.—Adult sheep tick (a) and puparium (b) (*Melophagus ovinus*). Enlarged. (After Osborn, 1896; Bul. No. 5, Div. Entomology, Dept. Agr.)

Chances for recovery.—Cases of apparent spontaneous recovery are rare. Usually, when proper methods of treatment are not adopted, the disease increases, leads to anæmia, emaciation, exhaustion, and death, and may result in a loss of from 10 to 80 per cent of the flock. Scab is favored by seasons when the wool is longest and by huddling or overcrowding the animals; also race, energy, temperament, age, state of health, length, fineness, and abundance of wool, and the hygienic conditions of the surroundings influence the course and termination of the disease. Young, weak, closely inbred animals and those with long coarse wool will most quickly succumb. Unhealthy localities, damp climate, and poorly ventilated sheds favor the disease. Pure or mixed Merino sheep succumb sooner than certain other breeds. The mortality varies according to conditions, but is highest in autumn and winter. When owners are careless, the death rate may be high; if untreated, the sheep may die in two to three months. Hygienic conditions, good food, and cool, dry

atmosphere tend to check the disease. Sheep sheds should accordingly be well ventilated and open to light and sunshine. With proper attention to hygienic conditions and thorough dipping a positive cure can be guaranteed.

Vitality of the parasite.—Taken from the sheep, the mites possess a remarkable vitality. It is generally stated that, kept at a moderate temperature on portions of scab, the adults may live from four to twenty days, but they will occasionally live much longer; cases are on record where they have lived three, four, or even six weeks when separated from sheep; if the atmosphere is dry, they will generally die in about fifteen days; but death is often only apparent, for the mites may sometimes be revived by warmth and moisture even after six or eight weeks; the fecundated females are especially tenacious of life. Various rather contradictory statements may be found regarding their resistance to cold: Krogmann states that they may live at a temperature of minus 10° C. (+ 14° F.) for twenty-eight days; other authors claim that the mites die in two hours at 47° F.; still other authors, that they die at 50° C. (122° F.). They are said to have been kept alive in cold water for six days and in warm water for ten days. Several authors admit, however, that the parasites are usually killed by a soaking rain; though it is claimed that in damp, dark stables they "may live for months."

Experience has shown that in some cases apparently healthy sheep have become infected in places where no sheep have been kept for four, eight, twelve, or even twenty-four months. The conditions underlying this infection are not thoroughly understood. Possibly some of the eggs have retained their vitality a long time and then hatched out; possibly the vitality of the fecundated female has also played a rôle; while it is not at all improbable that an entirely new infection has accidentally been introduced by birds or other animals. Certain authors of high standing scout the idea that birds can introduce an infection of scab, but there is no reason why birds should not do this, and there are some reasons for believing that they do. It has been noticed on the Experiment Station of the Bureau, for instance, that crows delight in perching on the backs of scabby sheep and picking at the scab; while so doing it is only natural that small tags of wool would adhere to their feet, and thus scatter scab. The fact that snails cling to birds' feet and are carried long distances is too well established to need discussion, and it is very probable that many of the cases where sheep are supposed to have become infected with scab on pastures which have not been occupied for one or two years are in reality cases of fresh infection by means of birds. From the data at hand, while it may be admitted that in some cases, under favorable conditions, the mites may live from spring to fall, it is scarcely within the limits of probability that either the scab mites or their eggs will live through a winter when separated from the sheep and exposed to the elements.

All matters connected with the vitality of the scab mite have an important bearing in explaining cases of indirect infection on roads over which scabby sheep have been driven, or in fields and sheds where they have been kept. From the facts now at our disposal we can lay down the following important rules:

(1) Scabby sheep should never be driven upon a public road; (2) sheds in which scabby sheep have been kept should be thoroughly cleaned, disinfected, and aired, and should be kept unused for *at least four weeks* (better two months) before clean sheep are placed in them; (3) fields in which scabby sheep have been kept should stand vacant *at least four weeks* (better six or eight) before being used for clean sheep; (4) a drenching rain will frequently serve to disinfect a pasture; but it is well to whitewash the posts against which scabby sheep have rubbed. Even after observing the precautions here given it is not possible to absolutely guarantee that there will be no reinfection, but the probabilities are against it.

Life history of the parasite.—A study of the life history of the scab parasite is necessary in order to determine several important points of practical value, such as the proper time for the second dipping, etc.

The female mite lays about 15 to 24 eggs on the skin, or fastened to the wool near the skin; a six-legged larva is hatched; these larvæ cast their skin and become mature; the mites pair and the females lay their eggs, after which they die. The exact number of days required for each stage varies somewhat, according to the writings of different authors, a fact which is probably to be explained by individual variation, and by the conditions under which the observations and experiments were made. Thus Gerlach, in his well-known work (1857), estimates about fourteen to fifteen days as the period required for a generation of mites from the time of pairing to the maturity of the next generation. He divides this time as follows: Under ordinary conditions the eggs hatch in three to four days, although two authors allow ten to eleven days for the egg stage; three or four days after birth the six-legged larvæ moult and the fourth pair of legs appears; this fourth pair is always present when the mites are two-thirds the size of the adults; when seven to eight days old the mites are mature and ready to pair; several (three or four) days are allowed for pairing; another generation of eggs may be laid fourteen to fifteen days after the laying of the first generation of eggs. Without going into all of the other observations on these points, it may be remarked that the eggs may not hatch for six or seven days; the six-legged larvæ may moult when three to four days old, and become mature; after pairing a second moult takes place, lasting four to five days; a third moult follows immediately, then eggs are laid and the adults die; in some cases there is a fourth moult, but apparently without any further production of eggs. Accepting Gerlach's estimate of fifteen days as an average for each generation of 10 females and 5 males, in three

months' time the sixth generation would appear and consist of about 1,000,000 females and 500,000 males.

Several practical lessons are to be drawn from these figures: First, it is seen that the parasites increase very rapidly, so that if scab is discovered in a flock the diseased sheep should immediately be isolated; second, if new sheep are placed in a flock they should either first be dipped, as a precautionary measure, or they should at least be kept separate for several weeks to see whether scab develops; third, since the chances for infection are very great, the entire flock should be treated, even in case scab is found only in one or two animals; fourth, as dipping is not certain to kill the eggs, the sheep

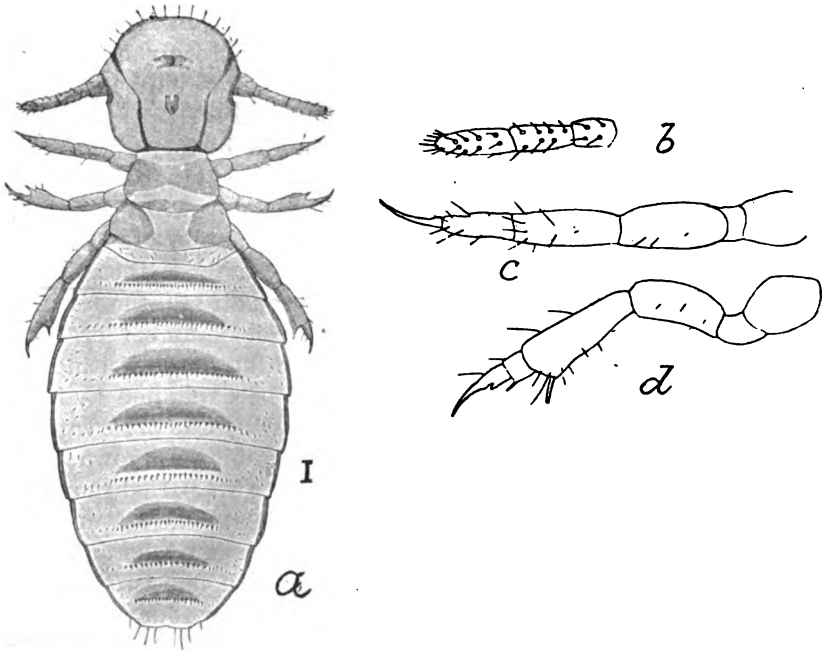


FIG. 21.—Sheep louse (*Trichodectes sphærocephalus*): a, female; b, antenna; c, d, dorsal and side view of leg. Enlarged. (After Osborn, 1896; Bul. No. 5, Div. Entomology, Dept. Agr.)

should be dipped a second time, the time being selected between the moment of the hatching of the eggs and the moment the next generation of eggs is laid. As eggs may hatch between three and seven, possibly ten or eleven, days, and as fourteen to fifteen days are required for the entire cycle, the second dipping should take place after the seventh day, but before the fourteenth day; allowing for individual variation and variation of conditions, the tenth, eleventh, or twelfth day will be the best time to repeat the dipping.

(2) HEAD SCAB, BLACK MUZZLE, OR SARCOPTIC SCAB.

Head scab is less frequent and less important than body scab. No case of it has ever been reported by the inspectors of this Bureau, and

many extensive sheep breeders and professional sheep dippers state that they have never heard of a case.

In this disease the parasites are much smaller than the psoropt of body scab. They are almost invisible to the naked eye, but may be seen with a magnifying glass. They are found on the moist under-surface of the crusts, and live on the fluids of the sheep. They give rise to a violent itching, causing the sheep to rub and scratch their heads and lick their lips; in advanced stages the eyes may be partly closed, and consequently the sight impaired; breathing, and even eating, may become difficult because of the formation of crusts around the mouth and nostrils. Small papules form, with soft centers; usually

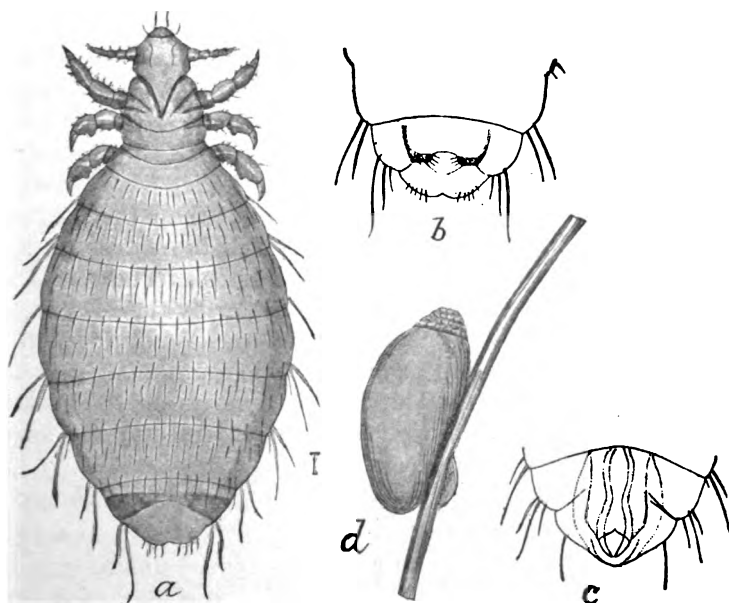


FIG. 22.—Sheep foot louse (*Haematopinus pedalis*): a, adult female; b, ventral view of terminal segment of same, showing brushes; c, terminal segments of male; d, egg. Enlarged. (After Osborn, 1896; Bul. No. 5, Div. Entomology, Dept. Agr.)

the rubbing causes them to break, and they exude a fluid which hardens and forms a scab; the scabs, increasing in number, may run together; they become thicker and harder, until almost the entire head is merged into one crust. Rubbing causes the crusts to break; the wounds heal and form scars; the skin thickens and is raised in folds, in which cracks appear and from which there may be bleeding. When affecting lambs the disease may assume an ulcerative character.

Parts of body affected.—This form of scab appears on parts of the body where the wool is scarce; usually beginning about the nostrils and on the upper lip, more rarely about the eyes and ears, it spreads to the cheeks, eyes, forehead, and under the jaws; in severe cases it may extend to the belly, front legs, knees, hocks, and pasterns. Coarse

dry wool favors it more than fine oily wool. The line between the diseased and the healthy skin is quite sharply defined.

Contagion.—Head scab is contagious from sheep to sheep, from sheep to goats, and rarely from sheep to man; when transmitted from sheep to horses, cattle, and dogs the disease remains local and does not spread. Head scab is also contagious from goats to sheep. Viborg states that the sarcoptic scab of pigs is contagious to sheep, but this is denied by Am-Pach. Chabert maintained that sarcoptic scab of dogs is transmissible to sheep, but this is doubtful.

Chances for recovery.—Head scab can be easily treated if taken in time, but if neglected it will cause inflammation of the eyes and extensive alterations in the skin, and will prevent the sheep from fattening.

(3) FOOT SCAB, OR CHORIOPTIC SCAB.

Foot scab is rare, if present at all, in this country, but a number of cases have recently been reported from England. It is not impossible that some of the cases supposed to be foot rot are in reality foot scab.

The minute parasites, which are much smaller than those of common scab, cause an intense itching, which leads the sheep to stamp their feet and scratch and bite the infected parts. There is a reddening of the skin, followed by scaling, and later by the formation of yellowish white crusts; the crusts thicken, cracks may form in the folds of the pasterns, and the legs may become quite unsightly.

Parts of the body affected.—The disease appears on the feet and legs, spreading slowly to the upper parts of the legs and the adjoining parts of the body, scrotum, or udder.

Contagion.—This disease is contagious from sheep to sheep, but not so actively as common scab.

(4) FOLLICULAR SCAB, OR DEMODECTIC SCAB.

The glands of a sheep's eyelids are occasionally infected with a fourth kind of microscopic mite, which is elongate and much like a worm. It has been recorded but a few times, and for the present, at least, is of no importance to the American sheep raiser.

CONDITIONS WHICH MAY BE MISTAKEN FOR SCAB.

Any parasite or condition which causes an itching, and thus leads the sheep to scratch themselves, or any abnormal condition of the skin, may be temporarily mistaken for scab; but if the rule is held in mind that no scab is possible without the presence of the specific parasites, it will be easily determined whether scab is present or not. The following are the more important cases to be considered:

(1) *Itching due to other parasites*, such as the common "sheep tick," true ticks, and lice, may be distinguished from scab by finding

the parasites. The dipping used for treating scab will also kill sheep ticks and lice.

(2) *Inflammation of the sebaceous glands.*—This may be mistaken for common scab. It appears most frequently in autumn. There is a severe itching, the skin is red and sensitive, and is covered with a strong-smelling, yellowish, viscid yolk; tufts of wool may be shed. It may be cured, after shearing, with any starchy lotion.

(3) *Rain rot.*—In rainy weather an eruption may appear on the skin which might be mistaken for scab. There is, however, no parasite present; itching is absent, and the trouble disappears when dry weather comes.

THE TREATMENT OF SCAB.

In the foregoing discussion attention has been called to the necessity of keeping sheep under proper hygienic conditions. That alone, though of importance in connection with the subject of treatment, can not be relied upon to cure scab. The only rational treatment consists in using some external application which will kill the parasites. Formerly medicines were given internally, and even within a few years past it has been claimed that feeding sulphur to sheep will cure the disease. The statements regarding sulphur were such as to lead us to try the experiment, which, however, was soon abandoned as unsuccessful. The external application of scab cures is in various ways made known as hand dressing, hand curing, spotting, pouring, smearing, and dipping. Of these methods, dipping is by far the most satisfactory.

HAND APPLICATIONS.

In case of head scab, or in light cases of foot scab, hand applications may be resorted to, and will frequently suffice. A nonpoisonous ointment may be made by taking 4 ounces of oil of turpentine, 6 ounces of flowers of sulphur, and 1 pound of lard. Mix the ingredients at a gentle heat, and rub in well with the hands or with a brush, at the same time breaking the crusts. The simple sulphur ointment may be made of 1 part of sulphur and 4 parts of lard; one-fourth part of mercurial ointment may be added. Few remedies are so useful in mange in dogs, ringworm, and other itching complaints as sulphur iodide, and it may well be given a trial on head scab. It is prepared as follow: Mix in a nonmetallic vessel, as a porcelain mortar, 4 ounces of iodine with 1 ounce of sublime sulphur, gently heating the mixture until it liquefies; the red-brown liquid upon cooling becomes a gray-black crystalline mass, insoluble in water, but soluble in glycerin and fats, with 8 or 10 parts of which it is mixed for ointments or liniments. An ointment of flowers of sulphur and carbolated vaseline would also probably give good results. One author advises for head scab and foot scab a mixture consisting of 1 part of mercurial ointment and 11 parts of sulphur ointment. Foot scab and head scab

would also probably respond to treatment with the various dips used for common scab.

Hand dressing is not recommended for common scab; in fact it must be looked upon as directly responsible for a considerable amount of the disease, since it is too often relied upon to cure the disease, while in reality it is only a palliative. The only condition under which hand dressings can be advised is in case scab is discovered in one or two sheep of a flock during severe winter weather, when dipping would be impracticable. In that event, the infected sheep should be immediately isolated from the flock; and they might be hand dressed, if desired, in order to hold the disease in check. It can not be too strongly insisted upon that "pouring," "spotting," etc., are only expensive and temporizing methods of dealing with scab.

"Pouring" is done as follows: Part the wool on the back by making a furrow with the finger from the head to the tail; furrows are also made along the shoulders and thighs to the legs, and on the sides; pour the ointment or dip in these furrows. A still better plan is to pour the warm dip from a coffeepot or teapot directly on the affected parts, rubbing it well in with the hand, a brush, or a corncob. It must be repeated for emphasis, however, that such treatment can not be relied upon, and should be used only in emergency cases when dipping is impracticable.

A mercurial ointment may be made as follows: (A) dissolve 1 pound of resin in one-half pint of oil of turpentine; (B) mix 1 pound of mercurial ointment with 6 pounds of lard, with gentle heat, and (C) when cool mix the two compounds, A and B. It should be remembered that mercurial ointments are not unattended with danger, and on this account it is better to prepare a small amount of dip and pour it on the affected part as described above.

DIPPING.

By far the most rational and satisfactory and the cheapest method of curing scab is by dipping the sheep in some liquid which will kill the parasites. The dipping process is as follows:

(1) Select a dip containing sulphur. If a prepared "dip" is used which does not contain sulphur, it is always safer to add about 16½ pounds of sifted flowers of sulphur to every 100 gallons of water, especially if, after dipping, the sheep have to be returned to the old pastures.

(2) Shear all the sheep at one time, and immediately after shearing confine them to one-half the farm for two to four weeks. Many persons prefer to dip immediately after shearing.

(3) At the end of this time dip every sheep (and every goat also, if there are any on the farm).

(4) Ten days later dip the entire flock a second time.

(5) After the second dipping, place the flock on the portion of the farm from which they have been excluded during the previous four or five weeks.

(6) Use the dip at a temperature of 100° to 110° F.

(7) Keep each sheep in the dip for two minutes by the watch—do not guess at the time—and duck its head at least once.

(8) Be careful in dipping rams, as they are more likely to be overcome in the dip than are the ewes.

(9) Injury may, however, result to pregnant ewes, which must, on this account, be carefully handled. Some farmers arrange a stage, with sides, to hold the pregnant ewes, which is lowered carefully into the vat, and raised after the proper time.

(10) In case a patent, or proprietary, dip, especially an arsenical dip, is used, the directions given on the package should be carried out to the letter.

CHOICE OF A PREPARATION FOR DIPPING.

Numerous different sheep dips are recommended by various parties, and undoubtedly many of them are efficacious; few dips can be named which some persons do not consider far superior, and other persons consider far inferior, to all other dips known; few dips can be found which have not cured cases of scab, and probably no dip can be named with which failures have not been reported. Under these circumstances the farmer should not be deceived by exaggerated statements in either extreme; he should recall that it lies in the business interest of the manufacturers of every proprietary, or patent, dip to advertise their own particular dip in every way possible, but that too often these merchants pursue the method of deprecating the use of home-made dips as “dangerous,” “ineffective,” “liable to produce blood poisoning,” etc., and of citing the accidents, failures, and dangers of other proprietary dips rather than of giving exact and reliable statements regarding the successes of their own compounds.

PROPRIETARY ARTICLES.

The Department can not properly advertise or recommend the use of any dip which is made from a secret formula. It can not be said that no such dip has any value as a scab cure, or that such dips have never met with any success, for that would be a misrepresentation of facts. The farmer should, however, know the composition of the material he is using. If he desires to use a ready-made dip, let him inform himself of the exact nature of that dip in order to prevent impositions and guard against dangers. He would do well to refuse to purchase any prepared dip which does not bear on each package a printed statement of the ingredients and their proportions, which the manufacturer guarantees are to be found in that package; he would also do well to avoid any dip which irresponsible parties advertise as

“the only sure cure for scab,” etc. Proprietors thus advertising are either showing gross ignorance of the history and nature of scab, and hence are not to be taken as advisers, or they are intentionally misrepresenting established facts.

In case of more than one proprietary dip, it seems quite clear from the circulars and advertisements distributed by the manufacturers that the firms have had little or no practical experience with scab, and that the extravagant claims set forth by them for their mixtures are little less than artful methods of advertising, rather than statements based upon any tests or experiments. Good examples of worthless or almost worthless dips are cited by Bruce, who quotes the treatment of 80,021 cases of scab with *Allen's Specific* with not a single case of cure! *Hayes's Specific* cured 6,255 cases and failed in 80,931 cases!

SUCCESS WITH HOMEMADE DIPS.

While a dip should not be condemned simply because it is prepared ready for use—for it may be frankly admitted that there are some excellent proprietary dips—the value of homemade dips must be insisted upon, and attention is called to the fact that it was almost entirely through homemade dips that scab was eradicated from certain of the Australian colonies, and that year after year, in the reports of the scab inspectors of Cape Town Colony, the first and third places are accorded to homemade dips, while second place is accorded (with some qualification) to a secret dip. In this connection the following significant remarks, made in 1892 by the chief inspector of stock in Queensland, will be of interest:

Our Australian experience of tobacco and sulphur and of lime and sulphur as the only effectual means of curing scab is such that at the stock conference held in Sydney in 1886, and again in Melbourne in 1889, attended by the chief and Government veterinarians of all the colonies, it was on both occasions decided that none but these two dips be recognized in the colonies, and this has now been embodied in regulations under the “Stock disease acts” of all the colonies.

The stamping out of scab in these colonies has been more retarded by vendors of patent dips than by any other cause; hence the determination of the governments of all the colonies to forbid the use of any specific except tobacco and sulphur, or lime and sulphur, for scab or for the (precautionary) dressing of imported sheep while in quarantine.

In view of the more or less frequent statements that scab was eradicated from the English colonies by killing the scabby sheep or by the use of prepared dips, it may be well to say that these statements are erroneous. “It is true an act was passed in New South Wales about 1851 compelling the slaughter of scabbed sheep, and a few remaining straggling flocks were destroyed under that act, but later, on the reappearance of scab in that colony in 1863 by infection from Victoria, the act was repealed, and the whole of the scabbed sheep, about 400,000, were completely cured by means of tobacco and sulphur.”¹

¹ Statement made by P. A. Gordon, chief inspector of stock, Queensland.

IMPORTANCE OF PROPER USE OF DIP.

Whatever dip is selected, the farmer should not forget that there are two ways to use that dip. One way is to prepare and use it in accordance with the directions given; the other way is to attempt to economize time, labor, or money by using the dip in weaker proportion than advised, by hurrying the sheep through the swim, or by later placing the dipped sheep under unfavorable conditions. If the former method is adopted with any of the established dips, the treatment ought to be followed with favorable results; if the latter method is adopted, the farmer himself must assume the responsibility of failure, no matter which dip he decides to use. Every farmer should therefore remember that when he has decided upon the dip he is to use his work has only begun; to use the dip properly is fully as important as to use a dip at all.

PRELIMINARY QUESTIONS IN CHOOSING A DIP.

The homemade dips which are most commonly used have either tobacco or sulphur as their basis, while the prepared dips contain tobacco, sulphur, arsenic, carbolic acid, etc., as curative agents.

In selecting a dip several points should be considered: First of all, the question of expense will naturally arise; next, the question as to whether or not scab actually exists in the flock to be dipped, or whether or not the dipping is more of a precautionary matter, or for the sake of cleansing the animal's skin. The facilities at hand, the setback to the sheep, and the length of the wool are also matters for consideration, as well as the pastures into which the dipped sheep are to be placed. Notwithstanding statements to the effect that a given dip can be used under all conditions, the above questions are evidently important.

Expense.—In estimating the expense, one should consider not only the actual outlay for the ingredients of the ooze, but the cost of fuel and labor, the injury, if any, to the sheep, and the liability of not curing the disease. It is much more economical to use an expensive dip and cure scab than it is to use a cheap dip and fail to cure it. To illustrate with a well-known homemade dip: A lime-and-sulphur dip may be made in ten to thirty minutes, with but little fuel and little labor, which may or may not cure the disease, and which will surely do great injury to the wool; or a lime-and-sulphur dip may be made in several hours' time, at the expense of considerable fuel, labor, and patience, which can be relied upon to cure scab, and which will do little or no injury to the wool. The first dip is cheap, but not economical; the second dip is more expensive, but more economical.

Does scab exist in the flock?—Every farmer should ask himself this question before he selects his dip. If scab does not actually exist and the wool is long, the dipping in this case simply being a matter of precaution, it is best not to select a dip containing lime. The use of the lime-and-sulphur dips is therefore not advised simply as pre-

cautionary dressing for healthy long-wooled sheep. On the contrary, the use of any dip containing lime as a precautionary measure should be avoided.

The facilities at hand for preparing dip.—If fuel is very scarce, so that it is impracticable to boil the mixture for at least two hours, the lime-and-sulphur dips should not be selected. A tobacco-and-sulphur dip, as well as many of the better proprietary dips, can be made without the necessity of lengthy boiling, and should be given preference whenever facilities for boiling are not at hand.

The length of the wool.—See remarks upon this subject in discussion of lime and sulphur, p. 118.

The pastures.—In case it is necessary to place the dipped sheep on the same pastures they occupied before being dipped, it is always best to use a dip containing sulphur. If a proprietary dip is selected under those circumstances, it is suggested that sulphur be added, about 1 pound of flowers of sulphur to every 6 gallons of dip. In case it is possible to utilize fresh pastures after dipping, the use of sulphur is not so necessary, but is always advisable. The object in using sulphur is to place in the wool a material which will not evaporate quickly, but will remain there for a longer period of time than the scab parasites ordinarily remain alive away from their hosts. By doing this the sheep are protected against reinfection.

KINDS OF DIPS.

Sulphur is one of the oldest known remedies for scab, its use dating back to Columella in the early part of the Christian era. As a scab eradicator, it must be placed among the best substances at our disposal. It is one of the constituents of certain proprietary dips, but its use to the farmer is best known in the tobacco-and-sulphur dip and in the lime-and-sulphur dip. These homemade mixtures are the two dips which have played the most important rôles in the eradication of scab from certain English colonies, and their use, especially the use *as well as the abuse* of lime and sulphur, is quite extensive in this country.

THE TOBACCO-AND-SULPHUR DIP.

The formula, as given here and as adopted by the New South Wales sanitary authorities, appears to have first been proposed in 1854 by Mr. John Rutherford. Regarding its success in Australia, Dr. Bruce, chief inspector of sheep for New South Wales, makes the following statements:

On the Hopkins Hill Station Mr. Rutherford, with two dressings of these ingredients, then cured over 52,000 sheep which had been infected for eighteen months; and he also subsequently cured with two dippings the sheep on Mount Fyans Station, where they were in a most wretched state, and had been scabby for more than three years, and that, too, in both cases, without destroying a single hurdle or yard or removing any of the sheep from their old runs.

Since then millions of scabby sheep have been permanently cured in Victoria in the same way, and in South Australia and New South Wales hundreds of thousands of scabby sheep have also been cleansed with tobacco and sulphur. In fact, this dressing has the credit of having eradicated scab from the flocks of both the latter colonies, and there are good grounds for asserting that had this remedy not been known and used neither colony would be, as they both are now, almost entirely free from the scourge. Judging therefore from the experience of the three colonies, there is no medicament or specific yet known [1884] that can be compared with tobacco and sulphur as a thorough and lasting cure for scab in sheep.

The proportions adopted by Rutherford, and afterwards made official by the scab sanitary authorities, are:

Tobacco leaves	pound..	1
Flowers of sulphur	do....	1
Water	gallons..	'6

The advantage of this dip lies in the fact that two of the best scab remedies, namely, tobacco (nicotine) and sulphur, are used together, both of which kill the parasites, while the sulphur remains in the wool and protects for some time against reinfection. As no caustic is used to soften the scab, heat must be relied on to penetrate the crusts.

Directions for preparing the dip.—A. Infusing the tobacco: Place 1 pound of good leaf or manufactured tobacco for every 6 gallons of dip desired in a covered boiler of cold or lukewarm water and allow to stand for about twenty-four hours; on the evening before dipping bring the water to near the boiling point (212° F.) for an instant, then remove the fire and allow the infusion to stand over night.

B. Thoroughly mix the sulphur (1 pound to every 6 gallons of dip desired) with the hand in a bucket of water to the consistency of gruel.

C. When ready to dip, thoroughly strain the tobacco infusion (A) from the leaves by pressure, mix the liquid with the sulphur gruel (B), and enough water to make the required amount of dip, and thoroughly stir the entire mixture.

All things considered, the tobacco-and-sulphur is as good a dip as is known at the present time.

See also the discussion of the tobacco dip on page 122.

LIME-AND-SULPHUR DIPS.

Under the term "lime-and-sulphur dips" is included a large number of different formulæ requiring lime and sulphur in different proportions. In general practice all of these dips are spoken of as "the lime-and-sulphur dip," but in reality each separate formula represents a separate dip.

To give an idea of the variety of the lime-and-sulphur dips, the

¹ The original formula reads 5 gallons (imperial) which are equivalent to 6 United States gallons.

following list is quoted, the ingredients being reduced in all cases to avoirdupois pounds and United States gallons:

1. The original "Victorian lime-and-sulphur dip," proposed by Dr. Rowe, adopted as official in Australia:

Flowers of sulphur.....	pounds..	20½
Fresh slaked lime	do.....	10½
Water.....	gallons..	100

2. South African (Cape Town) official lime-and-sulphur dip:

Flowers of sulphur (minimum).....	pounds..	15
Unslaked lime.....	do.....	15
Water.....	gallons..	100

3. South African (Cape Town) official lime-and-sulphur dip, February 4, 1897:

Flowers of sulphur.....	pounds..	20½
Unslaked lime	do.....	16½
Water.....	gallons..	100

4. Nevada lime-and-sulphur dip:

Flowers of sulphur.....	pounds..	16½
Lime	do.....	33½
Water.....	gallons..	100

5. Fort Collins lime-and-sulphur dip:

Flowers of sulphur.....	pounds..	33
Unslaked lime	do.....	11
Water.....	gallons..	100

6. A mixture which, used to some extent by this Bureau, contains the same proportions of lime and sulphur (namely, 1 to 3) as the Fort Collins dip, but the quantities are reduced to:

Flowers of sulphur.....	pounds..	24
Unslaked lime	do.....	8
Water.....	gallons..	100

Dangerous formulæ.

7. California lime-and-sulphur dip:

Flowers of sulphur.....	pounds..	100
Lime	do.....	25
Water.....	gallons..	100

8. A very dangerous misprinted formula to be found in several books and journals, probably due to a typographical error:

Flowers of sulphur.....	pounds..	100
Lime	do.....	150
Water.....	gallons..	100

In case of fresh scab, formula No. 6 will act as efficaciously as the dips with a greater amount of lime, but in cases of very hard scab a stronger dip, as the Fort Collins dip, should be preferred, or, in unusually severe cases, an ooze with more lime in proportion to the

amount of sulphur, such as the Victorian (No. 1), the Nevada (No. 4), or the South African (No. 3) dip, might be used.

Many other formulæ might be cited, but these are enough to show the great variations in the dips which have been used; and to prove that when a party simply states that "lime and sulphur" is an excellent dip, or that it is a dangerous dip, or that he has succeeded or failed with it, or that the lime-and-sulphur dip is injurious to the wool, his statements can not be taken as definite, unless he also states which lime-and-sulphur dip he used and how he used it.

Prejudice against lime-and-sulphur dips.

There is at present great prejudice (a certain amount of it justified, no doubt) against the use of lime and sulphur, emanating chiefly from the agents of patent, or proprietary, dips and from the wool manufacturers. It will be well, therefore, to consider the points brought forward by them against its use.

In the first place, it is frequently asserted that lime and sulphur do not cure scab. This statement is, of course, in the interest of proprietary dips, but it is based either upon an absolute ignorance or a misrepresentation of facts. Experience in Australia and South Africa, as well as in this country, has shown beyond any doubt that a lime-and-sulphur dip, when properly proportioned, properly prepared, and properly used, is one of the best scab eradicators known. Cases of its failure have been due to careless or improper methods of its preparation and use.

It is claimed by some that it produces "blood poisoning." But the cases of death following the use of lime-and-sulphur dips have been infinitesimally few when compared with the number of sheep dipped in these solutions and when compared with the deaths which have been known to follow the use of certain proprietary dips. The details of such accidents so far as they have been reported have not shown that death was due to any properly prepared and properly used lime-and-sulphur dip. If the formula of 100 pounds of sulphur, 150 pounds of lime, and 100 gallons of water has killed animals, that surely is no argument against the formula 33 pounds of sulphur, 11 pounds of lime, and 100 gallons of water, but simply shows that the former formula is too strong; if any other conclusion than this is drawn, consistency would compel us to reject many of our most valuable remedies because some parties had used them in overdose. The argument frequently raised against lime and sulphur—namely, that "shear-cut" sheep die when dipped immediately after shearing in a lime-and-sulphur dip which has stood for some time—can be used equally well against other dips, and simply shows that it is safer to use a fresh supply of dip and to allow a short time to elapse after shearing before dipping. It is highly probable that the cases of so-called "blood poisoning" of shear-cut sheep are generally due to an infection with

bacteria in stale dip containing putrefying material. Some cases of death are also said to have occurred after using a lime-and-sulphur dip made in brass kettles.

In an experiment by this Bureau, 5 c. c. of a clear lime-and-sulphur ooze (Formula No. 6) has been injected under the skin of a sheep without producing any evil effects.

The greatest objection raised against the use of lime-and-sulphur dip is that it injures the wool. This objection is raised by many wool manufacturers, and echoed with ever-increasing emphasis by the manufacturers of prepared dips; while, after years of extensive experience with a properly prepared dip, its injury to the wool is strongly and steadfastly denied by the agricultural department of Cape Colony.

It is believed that a certain amount of justice is attached to this objection to lime and sulphur as generally used; unless, therefore, lime and sulphur can be used in a way which will not injure the wool to an appreciable extent, we should advise against its use in certain cases; in certain other cases the good accomplished far outweighs the injury it does. Let us, therefore, examine into this damage and its causes.

The usual time for dipping sheep is shortly after shearing, when the wool is very short; whatever the damage at this time, then, it can be only slight, and the small amount of lime left in the wool will surely do but little harm.

In full fleece, lime and sulphur will cause more injury. In Australia the deterioration was computed by wool buyers at 17 percent, although, in Cape Colony the department of agriculture maintains that if properly prepared, and if only the clear liquid is used, the sediment being thrown away, the official lime-and-sulphur formula will not injure the long wool. In our own experiments we have found some samples of wool injured by dipping, while on other samples no appreciable effect was noticeable.

It must not be forgotten that other conditions, such as variations in the feed, pasturing on alkaline land, ill health from any cause, etc., may cause brittleness of the wool, which might be mistaken for the effects of lime and sulphur.

If a lime-and-sulphur dip is used, care must be taken to give the solution ample time to settle; then only the clear liquid should be used, while the sediment should be discarded. In some of our tests on samples of wool we have found that the dip with sediment has produced very serious effects even when no appreciable effects were noticed on samples dipped in the corresponding clear liquid.

Experience has amply demonstrated that a properly made and properly used lime-and-sulphur dip is one of the cheapest and most efficient scab eradicators known, but its use should be confined to flocks in which scab is known to exist, and to shorn sheep, with the exception of very severe cases of scab in unshorn sheep. It should

only be used when it can be properly boiled and settled. The use of lime-and-sulphur dips in flocks not known to have scab, especially if the sheep are full fleeced, can not be recommended; in such cases tobacco, or sulphur and tobacco, is safer and equally good.

If a lime-and-sulphur dip is chosen, it is better for ordinary cases to use the solutions containing a small amount of lime and three times as much sulphur as lime, as the Fort Collins formula (33 pounds of sulphur and 11 pounds of lime to every 100 gallons of water) or the Bureau of Animal Industry formula (No. 6) (24 pounds of sulphur and 8 pounds of lime to 100 gallons of water), rather than the formula with a greater proportion of lime.

If the stronger solutions, as the Victorian formula (No. 1), or the present South African formula (No. 3), or the Nevada formula (No. 4) are used at all, their use should be confined to unusually severe outbreaks. Under no circumstances should the California formula (No. 7) or formula No. 8 be used. They are too strong, and the latter is especially liable to kill the sheep.

Another objection raised to the use of lime and sulphur is the claim that the "shrinkage" in the sheep after the use of these dips is greater than after the use of other dips. In reply to this objection, raised chiefly by patent-dip manufacturers, it can only be repeated that such has not been the experience of this Bureau (see p. 126), nor was it the experience of Professor Gillette in his experiments in Colorado. The burden of proof for the opposite statement, with exact statistics, rests upon those who raise this objection.

Still another objection advanced against lime and sulphur is that their continued use year after year will gradually decrease the annual clip. Whether this objection be valid or not, it is scarcely necessary to discuss it in detail in this place; for, in the first place, the average sheep raiser of this country does not keep the same sheep "year after year," but sends most of his sheep (breeding ewes and the rams excepted) to market. Hence there will usually be little opportunity to injure the wool of a given animal "year after year." In the next place, if lime and sulphur are properly used one year, so that the flock is freed from scab and if reinfection be guarded against, it will not be necessary to resort again to lime and sulphur.

These objections have been reviewed somewhat in detail in order to place the facts, so far as obtainable, before the farmer. It is not particularly advised by the Bureau that lime and sulphur be used in this country in preference to sulphur and tobacco, or tobacco alone, or any other effective dip. In fact, it is hoped that within ten years there will be no further use for the lime-and-sulphur dips. At the same time, where it is a choice, on the one hand, between lime and sulphur, with a temporary slight deterioration in the value of wool, but an absence of scab, and, on the other hand, the use of a secret and ineffective patent dip, with the continual presence of scab, and

hence permanent deterioration in wool, there can be no doubt that the decision should be in favor of lime and sulphur (properly prepared and properly used).

All things considered, where it is a choice between sacrificing the weight of sheep, and to some extent the color of the wool, by using tobacco and sulphur, and sacrificing the staple of the wool by using lime and sulphur, the farmer should not hesitate an instant in selecting tobacco in preference to lime. The loss in weight by using tobacco and sulphur is not much greater than the loss in using lime and sulphur, while the loss in staple is of more importance than a slight discoloration.

Preparation of the mixture.—Almost as many different methods of preparing the liquid exist as there are different formulæ, some of the methods laying great stress upon sifting both the lime and the sulphur, others laying great stress upon allowing the liquid to settle, others leaving out of consideration both of these points. The method which has been found in the Bureau to be the easiest and most satisfactory is as follows:

A. Take 8 to 11 pounds of unslaked lime, place it in a mortar box or a kettle or pail of some kind, and add enough water to slake the lime and form a "lime paste" or "lime putty."¹

B. Sift into this lime paste three times as many pounds of flowers of sulphur as used of lime, and stir the mixture well.

Be sure to weigh both the lime and the sulphur. Do not trust to measuring them in a bucket or to guessing at the weight.

C. Place the sulphur-lime paste in a kettle or boiler with about 25 to 30 gallons of boiling water, and boil the mixture for two hours at least, stirring the liquid and sediment. The boiling should be continued until the sulphur disappears, or almost disappears, from the surface; the solution is then of a chocolate or liver color. The longer the solution boils the more the sulphur is dissolved, and the less caustic the ooze becomes. Most writers advise boiling from thirty to forty minutes, but we obtain a much better ooze by boiling from two to three hours, adding water when necessary.

D. Pour the mixture and sediment into a tub or barrel placed near the dipping vat and provided with a bunghole about four inches from the bottom and allow ample time (two to three hours, or more if necessary) to settle.

The use of some sort of settling tank provided with a bunghole is an absolute necessity, unless the boiler is so arranged that it may be used both for boiling and settling. An ordinary kerosene oil barrel

¹Many persons prefer to slake the lime to a powder, which is to be sifted and mixed with sifted sulphur. One pint of water will slake three pounds of lime if the slaking is performed slowly and carefully. As a rule, however, it is necessary to use more water. This method takes more time and requires more work than the one given above, and does not give any better results. If the boiled solution is allowed to settle the ooze will be equally as safe.

will answer very well as a small settling tank. To insert a spigot about three to four inches from the bottom is an easy matter. Draining off the liquid through a spigot has the great advantage over dipping it out in that less commotion occurs in the liquid, which therefore remains freer from sediment.

E. When fully settled, draw off the clear liquid into the dipping vat and add enough warm water to make 100 gallons. The sediment in the barrel may then be mixed with water and used as a disinfectant, *but under no circumstances should it be used for dipping purposes.*

A double precaution against allowing the sediment to enter the vat is to strain the liquid through ordinary bagging as it is drawn from the barrel.

In watching the preparation of lime-and-sulphur dips by other parties the Bureau investigators have found some persons who laid great stress upon stirring the sediment well with the liquid before using the ooze. This custom is undoubtedly responsible for a great deal of the prejudice which exists at present against lime-and-sulphur dips; and considering the preparation of these dips in this way there is no wonder at the immense prejudice against them in certain quarters.

To summarize the position of the Department on the lime-and-sulphur dips: When properly made and properly used, these dips are second to none and equalled by few as scab eradicators. There is always some injury to the wool resulting from the use of these dips, but when properly made and properly used upon shorn sheep it is believed that this injury is so slight that it need not be considered; on long wool the injury is greater and seems to vary with different wools, being greater on a fine than on a coarse wool. This injury consists chiefly in a change in the microscopic structure of the fiber, caused by the caustic action of the ooze. When improperly made and improperly used the lime-and-sulphur dips are both injurious and dangerous, and in these cases the cheapness of the ingredients does not justify their use. In case scab exists in a flock and the farmer wishes to eradicate it, he can not choose a dip which will bring about a more thorough cure than will lime and sulphur (properly made and properly used), although it will be perfectly possible for the farmer to find several other dips which will, when properly used, be nearly or equally as effectual as any lime-and-sulphur dip. There is no dip to which objections can not be raised.

POTASSIUM-SULPHIDE DIP.

It has been proposed by several parties to use a potassium-sulphide dip, and such a dip has been tried to some extent. As yet, however, judgment upon it must be reserved. Gillette tried a dip composed of 4½ pounds of potash lye, 16 pounds of flowers of sulphur, and 100 gallons of water, and promises further reports on its effectiveness. Sheep dipped in this liquid gained but 6 pounds, namely, the same as the sheep treated with carbolic dip.

TOBACCO DIPS.

The active principle of tobacco, upon which the tobacco dips depend for their action, is a poisonous substance known as nicotine. This poison when applied to animals externally in too strong solutions may cause nausea, fainting, and even death. The dog and the rabbit are particularly susceptible to its effects. Diluted to about thirty-three one-thousandths to sixty one-thousandths of 1 per cent it makes a slow but sure-acting and excellent sheep dip.

Unfortunately the percentage of nicotine varies greatly, not only in different kinds of tobacco, but also in different parts of the plant, in different years, and even in different parts of the same package. There is more nicotine in the leaves, for instance, than in the stems. In fermented tobacco there seems to be a certain relation between the amount of nicotine and the amount of juice present, so that in general dry thin leaves do not contain so much nicotine as thick, "fat" leaves. The variation in percentage of nicotine in different kinds of tobacco may be seen from the following table of determinations taken from Kissling, 1893:

Statement giving the name of tobacco and amount of nicotine in percentage of dry substance.

	<i>Per cent.</i>		<i>Per cent.</i>
Virginia	4.80	Brazil	1.14
Virginia	4.30	Turkish	2.51
Kentucky	4.50	Elsace	1.91
Sumatra	4.10	Elsace	0.92
Seedleaf	3.70	Maryland	1.26
Seedleaf	3.00	Maryland scrubs	1.17
Havana	3.00	Carman	1.18
Havana	1.90	Ohio Bay	1.06
Brazil	2.78	Ambairma	1.17
Brazil Felix	2.73	Domingo	0.82
Brazil Felix	1.25	Ohio	0.68
Java	2.61		

In four carloads of stems, aggregating 127,273 pounds, one American firm extracted 1,405.43 pounds of nicotine, 1.104 per cent.

While the above figures represent the percentages extracted in the chemical and manufacturing laboratories, they do not necessarily represent the amount which the farmer would be able to extract with the methods and apparatus at his disposal. On account of the variation in the amount of nicotine in the different samples of tobacco, it is practically impossible for the farmer to make up an exact desired strength of tobacco dip if he prepares his own mixture from the leaves. He can, however, prepare a mixture which will come within the limits necessary to kill the scab parasites. If a solution of an exact given strength is desired, it will be necessary to buy prepared nicotine or prepared tobacco dips of a guaranteed strength and reduce them to the strength determined upon.

To prepare the tobacco dip from the leaves, it is best to use at least

21 pounds of leaves to every 100 gallons of water. Assuming that a tobacco leaf is used from which the farmer might extract 2 per cent of nicotine, the 100 gallons of ooze would contain slightly more than five hundredths of 1 per cent; to obtain 100 gallons of ooze of thirty-three one-thousandths of 1 per cent strength, it would be necessary to use 21 pounds of tobacco yielding nearly 1.3 per cent nicotine.

Directions for preparing the dip.—For every 100 gallons of dip desired, take 21 pounds of good prepared tobacco leaves; soak the leaves in cold or lukewarm water for twenty-four hours in a covered pot or kettle; then bring the water to near the boiling point for a moment and, if in the morning, allow the infusion to draw for an hour; if in the evening, allow it to draw over night; the liquid is next strained (pressure being used to extract as much nicotine as possible from the wet leaves) and diluted to 100 gallons per 21 pounds of tobacco. This dip should be used as fresh as possible as it contains a large amount of organic material which will soon decompose.

The proportions here given, 21 pounds of prepared tobacco leaves to 100 gallons of water, have given very satisfactory results, especially in Cape Town Colony, where the reports of the scab inspectors accord this homemade tobacco dip third place among the dips officially recognized. In regard to one of the proprietary tobacco dips the Cape Town agricultural department reports as follows: "Highly spoken of by several inspectors. Very efficacious, and improves the quality of the wool, making it soft and pliable. The one thing which militates against its general use is its expense, hindering the poorer farmers from using it. It is allowed to be one, if not the best, of the patent dips in use, and also the safest." By all means the use of a tobacco dip, or of the tobacco-and-sulphur dip, in preference to the lime-and-sulphur dips, is advised in case the sheep to be dipped show no unmistakable signs of scab.

The advantages of the tobacco dip are that it is comparatively cheap, since the farmer can grow his own tobacco; that it is effectual and at the same time not injurious to the wool. The disadvantages of the dip are that it sometimes sickens the sheep; that it also occasionally sickens the persons who use it, especially if they are not smokers; it spoils very rapidly; it causes a greater setback than lime and sulphur, but less of a setback than carbolic dips.

ARSENICAL DIPS.

There are both homemade arsenical dips and secret proprietary arsenical dips. It is well to use special precautions with both because of the danger connected with them. One of the prominent manufacturers of dips, a firm which places on the market both a powder arsenical dip and a liquid nonpoisonous dip, recently summarized the evils of arsenical dips in the following remarkable manner:

The drawbacks to the use of arsenic may be summed up somewhat as follows: (a) Its danger as a deadly poison. (b) Its drying effect on the wool. (c) Its

weakening of the fiber of the wool in one particular part near the skin, where it comes in contact with the tender wool roots at the time of dipping. (d) Its not feeding the wool or stimulating the growth, or increasing the weight of the fleece, as good oleaginous dips do. (e) The danger arising from the sheep pasturing, after coming out of the bath, where the wash may possibly have dripped from the fleece, or where showers of rain, after the dipping, have washed the dip out of the fleece upon the pasture. (f) Its occasionally throwing sheep off their feed for a few days after dipping, and so prejudicing the condition of the sheep. (g) Its frequent effect upon the skin of the sheep, causing excoriation, blistering, and hardness, which stiffen and injure the animal, sometimes resulting in death.

Although this manufacturer has gone further in his attack upon arsenic than this Bureau would have been inclined to do, it must be remarked that when a manufacturer of such a dip can not speak more highly of the chief ingredient of his compound than this one has done in the above quotation, his remarks tend to discredit dips based upon that ingredient. It might be added that Bruce, the chief inspector of live stock for New South Wales, pays his respects to arsenical dips with the statement, "Arsenic and arsenic and tobacco (with fresh runs) cured 9,284 and failed with 9,271."

It may be said, on the other hand, that arsenic really has excellent scab-curing qualities; it enters into the composition of a number of the secret dipping powders and forms the chief ingredient in one of the oldest secret dips used. This particular dip has been given second place (with some qualifications) among the officially recognized dips in South Africa. In deference to the opinion of those who prefer an arsenical dip several formulæ are quoted here.

Formulæ for arsenical dips.—Finlay Dun recommends the following: Take 3 pounds each of arsenic, soda ash (impure sodium carbonate) or pearl ash (impure potassium carbonate), soft soap, and sulphur. A pint or two of naphtha may be added if desired. The ingredients are best dissolved in 10 to 20 gallons of boiling water and cold water is added to make up¹ 120 gallons. The head of the sheep must, of course, be kept out of the bath.

A mixture highly indorsed by certain parties consists of the following ingredients:

Commercially pure arsenite of soda	pounds..	14
Ground roll sulphur.....	do.....	34½
Water	gallons (U. S.)..	432

The arsenite of soda is thoroughly mixed with the sulphur before being added to the water.

Precautions in use of arsenical mixtures.—Any person using an arsenical dip should bear in mind that he is dealing with a deadly poison. The following precautions should be observed:

(1) Yards into which newly dipped sheep are to be turned should first be cleared of all green food, hay, and even fresh litter; if per-

¹The original formula reads 100 (imperial) gallons, which equal 120 United States gallons.

fectly empty they are still safer. (2) When the dipping is finished, the yard should be cleaned, washed, and swept, and any unused ooze should at once be poured down a drain which will not contaminate food or premises used by any animals. (3) Dipped sheep should remain in an open, exposed place, as on dry ground. (4) Overcrowding should be avoided, and every facility given for rapid drying, which is greatly facilitated by selecting fine, clear, dry weather for dipping. (5) On no account should sheep be returned to their grazings until they are dry and all risk of dripping is passed.

Suggestion as to danger.—The formulæ given above are copied from the writings of men who have had wide experience in dipping, but this Bureau assumes no responsibility for the efficacy of the dips given or for their correct proportions. Furthermore, as long as efficacious nonpoisonous dips are to be had, we see no necessity for running the risks attendant upon the use of poisonous dips.

CARBOLIC DIPS.

A carbolic-acid dip may be made at home or may be purchased as a proprietary article. This class of dips kills the scab mites very quickly, but unfortunately the wash soon leaves the sheep, which is consequently not protected from reinfection in the pastures. If, therefore, a carbolic dip is selected, it is well to add flowers of sulphur (1 pound to every 6 gallons) as a protection against reinfection.

The advantages of carbolic dips are that they act more rapidly than the tobacco or sulphur dips, and that the prepared carbolic dips are very easily mixed in the bath. They also seem, according to Gillette, to have a greater effect on the eggs of the parasites than either the sulphur or the tobacco dips. The great disadvantages of this class of dips are, first in some of the proprietary dips, that the farmer is uncertain regarding the strength of material he is using; second, the sheep receive a greater setback than they do with either lime and sulphur or tobacco.

Gillette reports most excellent results from the use of a certain prepared carbolic dip. The Bureau purchased the same dip upon the open market and tested its effects upon the sheep in the proportion recommended by the manufacturer on the label of the package and also in one-half and one-third that strength. In the first and second tests the dip was severe both on the sheep and on the operators. In one case it caused a considerable, though temporary, eruption on the hands and arms of an operator. In all three cases the dipped sheep were almost overcome in the dipping tank, and upon recovering themselves ran around the field in an excited manner, bleating loudly and shaking their heads and tails. The eyes were more congested than we have ever seen them to be after a lime-and-sulphur or a tobacco dip.

An objection to some of the proprietary carbolic dips is that the

manufacturers themselves apparently are little acquainted with their own mixtures. Their claims are extravagant and their directions often contradictory. It may be admitted that the carbolic dips are promising and that they may have a brilliant future, but they have not had a very brilliant past, and this Bureau is inclined to be extremely conservative in regard to them and to advise their manufacturers to prepare them in a guaranteed strength with more explicit directions for use than are to be found in the present circulars. The dip just referred to was certainly more severe in its effects on the sheep than can be justified by its quick action in killing the scab parasites, considering that other equally effective but milder solutions are to be had.

We also found in our tests (which are not yet fully completed) that the sheep have gained less in weight when dipped in certain two of these washes than when dipped in lime and sulphur, or in sulphur and tobacco, or in tobacco.

If a carbolic dip is used care must be taken that the ingredients form a thorough emulsion; if a scum arises to the top, a softer water should be used.

In justice to this class of dips, it is only fair to state that while the views here expressed are entirely in accord with the opinions of some authorities, they do not agree with the views held by others; but they are based upon the material purchased in open market, and probably represent the experience of many who have used these dips. The investigations of the Bureau certainly show that more tests are necessary before this class of dips can be indorsed. It is hoped that these tests may be made in the near future.

One of the prominent proprietary carbolic dips was formerly recognized as one of the three official dips in New South Wales, but it has now been stricken from the list. In Cape Town carbolic dips are not much used, and in the official reports little is said concerning them.

SETBACK TO THE SHEEP FROM DIPPING.

Dipping often results in a slight setback. If sheep are weighed immediately before dipping and again at the same hour the following day, it will be noticed that the weight has changed. There may be a gain, but usually there is a loss, varying from $\frac{1}{2}$ to $3\frac{1}{2}$ pounds. The second day there may also be either a gain or loss. As the weight of sheep varies from day to day from 1 to 5 pounds in loss or gain, due chiefly to the increase or decrease of the amount of fodder and water in the stomach, the effects of dipping can not be estimated in twenty-four or forty-eight hours. In order to meet statements made concerning loss or gain in weight, this Bureau had sheep dipped at stated intervals, and the weights taken from week to week; all the sheep were kept under exactly the same conditions. The dips used were

lime and sulphur, tobacco and sulphur, and two proprietary carbolic dips.

At the end of about two months, after three dippings, all of the sheep showed a gain, with the exception of one of the sheep from the carbolic dip, which lost slightly. The lowest gain among the sheep treated with tobacco dip was $3\frac{1}{2}$ pounds, the highest $11\frac{1}{2}$ pounds. The lowest gain among the sheep treated with lime and sulphur was 7 pounds, the highest $8\frac{1}{2}$ pounds. The lowest gain among the sheep treated with the carbolic dip was $1\frac{1}{2}$ pounds, the highest $3\frac{1}{2}$ pounds, while one animal lost $\frac{1}{2}$ pound. The sheep were given a fourth dipping, and at the end of another month showed the following gains and losses over their original weight at first dipping: Sheep treated with tobacco, 9 to 15 pounds gain; sheep treated with lime and sulphur, $11\frac{1}{2}$ to 14 pounds gain; sheep treated with carbolic dip, 1 to $6\frac{1}{2}$ pounds gain, in one case $13\frac{1}{2}$ pounds lost.

The experiment was then repeated, the lime and sulphur being used on sheep previously dipped in carbolic or tobacco dips, and vice versa. After ten days the sheep treated with lime and sulphur had gained from 2 to 3 pounds; the sheep treated with tobacco had remained stationary or had lost from 1 to $1\frac{1}{2}$ pounds; the sheep treated with carbolic dip had gained as high as 1 pound or remained stationary or had lost as much as $2\frac{1}{2}$ pounds. At this point circumstances intervened which closed the experiments for the season.

Gillette has also made determinations of the loss of weight of sheep from dipping. Part of his results agree with ours and part differ. The chief point of difference in opinion is that Gillette considers that the best conclusion can be based upon weights taken a few days after dipping, while we consider the weight at a later period as the better criterion. Gillette gives weights from November 17 to December 22, and, taking the cases where the sheep have been dipped twice, we see from his tables that the carbolic sheep gained on an average 6 pounds, the sheep treated with tobacco gained 8 pounds, the sheep treated with arsenical dip gained 8 pounds, the sheep treated with lime and sulphur¹ gained 9 pounds, while the sheep which were not dipped, in order to give a basis for comparison, gained 6 pounds.

Holding in mind that sheep may apparently gain or lose about 3 pounds per day when not dipped, it is seen from the experiments by Gillette, in Colorado, and by this Bureau, in the District of Columbia, that the oft-repeated claim that lime-and-sulphur dips give a greater setback than other dips are erroneous. In both the Western and the Eastern experiments the sheep treated with lime and sulphur averaged

¹ Unfortunately for the comparison, this lot did not receive the same fodder as the others.

the greatest gain, the sheep treated with tobacco the second highest gain, while the carbolic sheep showed the lowest gain.

DIPPING PLANTS.

There are numerous kinds of dipping plants in use, the size and style varying according to the conditions which are to be met and the individual taste of the owner.

The farmer who has but a small flock can use a small portable vat for dipping, turning a part of his barn or some shed into a catching pen; by holding the sheep a moment at the top of the incline, as the animals emerge from the vat, and allowing them to drain, he can do away with the necessity of a draining yard.

When large flocks are to be dipped at stated periods it will be economy to build a permanent plant. Such a plant should consist of (1) collecting and forcing yards, provided with a (2) drive, and (3) chute, or slide, into the (4) dipping vat, from which an (5) incline with cross cleats leads to the (6) draining yards.

Heating tanks or boilers are also necessary. For a small vat any portable caldron (figs. 23 and 24) with a capacity of 30 to 100 gallons will answer, and the proper temperature may be maintained by pouring fresh hot ooze into the vat as the supply is exhausted by the dipping. In the large permanent plants the temperature can best be regulated by means of a steam pipe or hot-water coil close to the floor of the tub.

Thermometers are an absolute necessity. The floating dairy thermometer (fig. 25) will be found to be most convenient, and several extra thermometers should be kept on hand to replace broken instruments. The thermometer is dropped into the vat and allowed to float for a short time, then quickly removed and the temperature determined. It is well to make paint marks at the side of the 100° and 110° points.

Building material.—The yards and vat may be built of wood, concrete, cemented stone, or brick, according to the individual taste of the owner and the facilities at hand.

Dimensions.—The dimensions of the various parts given in the following descriptions may be varied according to the breed and the number of sheep to be dipped. Dipping liquid will be saved by making the tub much narrower on the bottom than at the top. On top, simple oblong dipping tanks vary from 1 foot 9 inches to 3 feet in breadth, 2 feet or 2 feet 6 inches forming a convenient medium. Floors vary from 6 inches to 3 feet in width, 9 inches forming a good working medium. Depth varies from 3 feet to 5 feet 6 inches, 4 feet to 5 feet forming a convenient medium. If calves are to be dipped in the same vat, it will be best to make the tub 5 feet or 5 feet 6 inches deep.

In sinking the tub in the ground it is always well to have the top of

the tub 9 inches above the ground line. It is also well to sink one end (where the sheep are thrown in) slightly lower than the other end, as this will make it easier to empty and clean the vat.

Crutches, or forks.—In using large vats crutches, or dipping forks, are necessary, and even with small vats they are useful. Crutches should be 5 or 6 feet long. The handle should be strong (rake handles are a little too light). One end is provided with an iron ferrule, into which the bent iron is inserted. The iron should be one-half inch round or three-quarters inch halfround. The form of the crutches is shown in figs. 26 and 27.

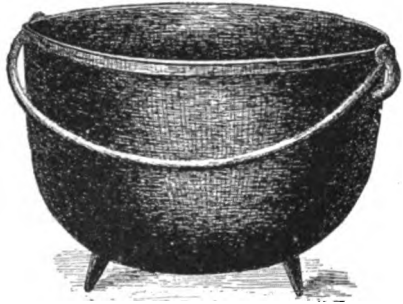


FIG. 23.—A simple caldron which may be used for boiling dip.

Gauges.—The capacity of tubs should be plainly marked on the side every 3 or 6 inches, in order to correctly measure the amount of liquid.



FIG. 24.—A caldron with stove.

SMALL PORTABLE VATS FOR SMALL FLOCKS.

If no regular dipping vat is at hand, a good-sized tub may be used, as shown in fig. 28. Dipping in this manner is slow and tedious, but

may be resorted to in case of necessity, as, for instance, when a few sheep are bought from another flock which is not known to be absolutely free from scab. If care is taken to dip thoroughly, the dipping may be done as effectually in such a tub as it could be done in a large vat. Recourse to ordinary tubs is not advised, however, when it is possible to use regular dipping vats. Lambs may, in case of necessity, be dipped in troughs, as shown in fig. 29.

A small portable vat, suitable for use in dipping small flocks, is shown in fig. 30. When not in use, this vat may be conveniently stored away. An advantage connected with this vat is that it may be drawn from



FIG. 26.—A crutch, or dipping fork. (Copied from the *Agricultural Journal*, 1894, p. 261.)

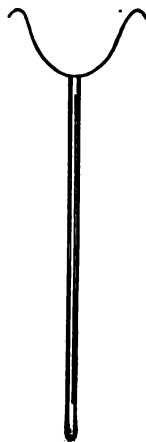


FIG. 27.—Another style of crutch, or dipping fork.

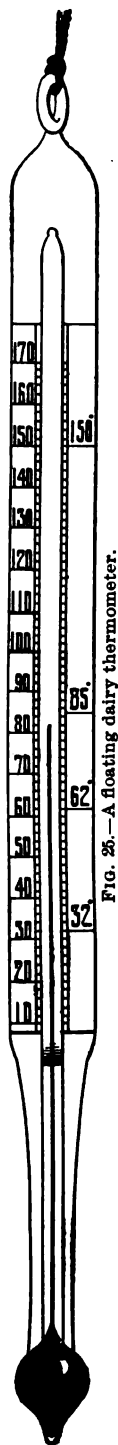


FIG. 25.—A floating dairy thermometer.



FIG. 28.—Dipping sheep in a tub. (Copied from *Stewart's The Shepherd's Manual*, 1882, p. 47.)

place to place as desired. The dimensions here given may be varied, according to individual taste, by making the vat longer, broader, or deeper. A convenient size will be 9 feet



FIG. 29.—Trough for dipping lambs. (Copied from Stewart's *The Shepherd's Manual*, 1882, p. 48.)

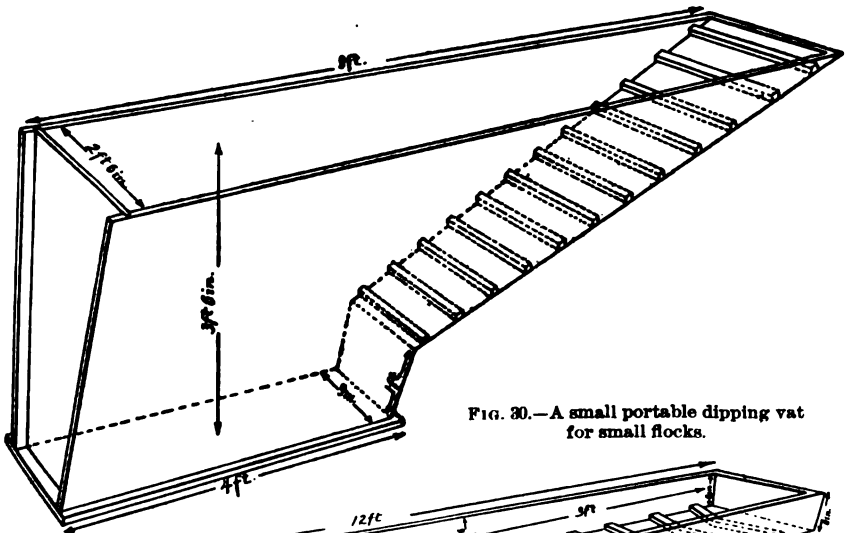


FIG. 30.—A small portable dipping vat for small flocks.

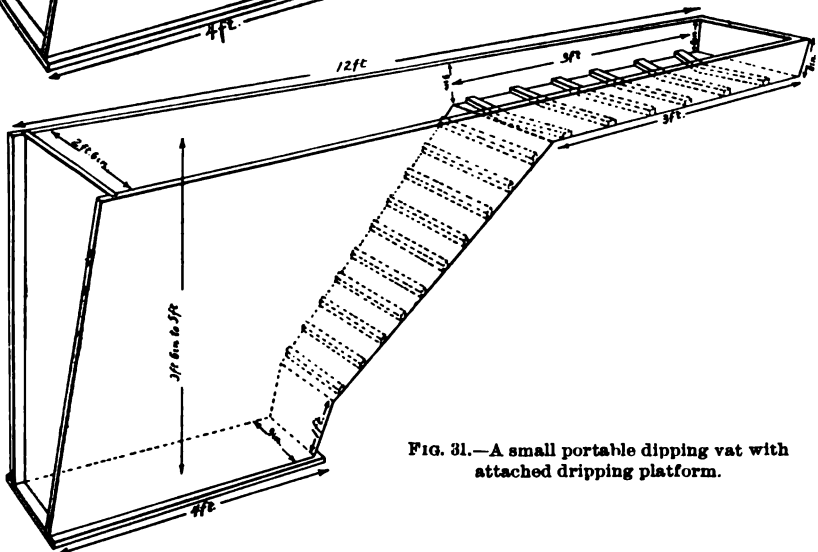


FIG. 31.—A small portable dipping vat with attached dripping platform.

long by $2\frac{1}{2}$ feet broad at the top, 9 inches broad at the bottom, and $3\frac{1}{4}$ to 5 feet deep; the floor measures 9 inches broad by 4 feet long; from 1

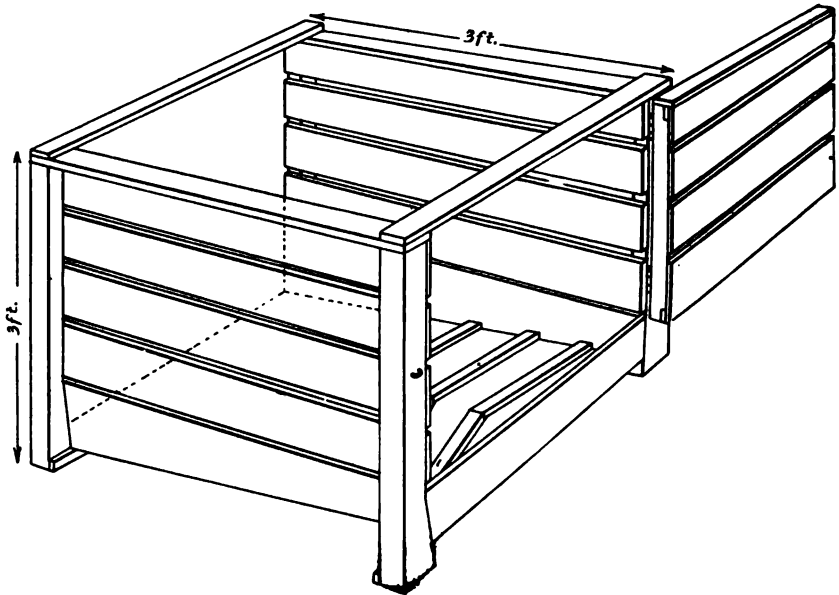


FIG. 32.—Detachable skeleton box, with gate, to fit over the dripping platform shown in fig. 31.

foot above one end of the floor a slant with cross cleats rises to the top and end of the vat. The sheep are dropped in by hand, one at a



FIG. 33.—A small patented portable vat arranged as a cart. (Copied from Armatage, 1896, *The Sheep Doctor*, p. 494.)

time, at the deep end, and after being held in the dip for two minutes are allowed to leave the vat at the slanting end. They are held a moment on the slant to allow them to drain off, thus economizing

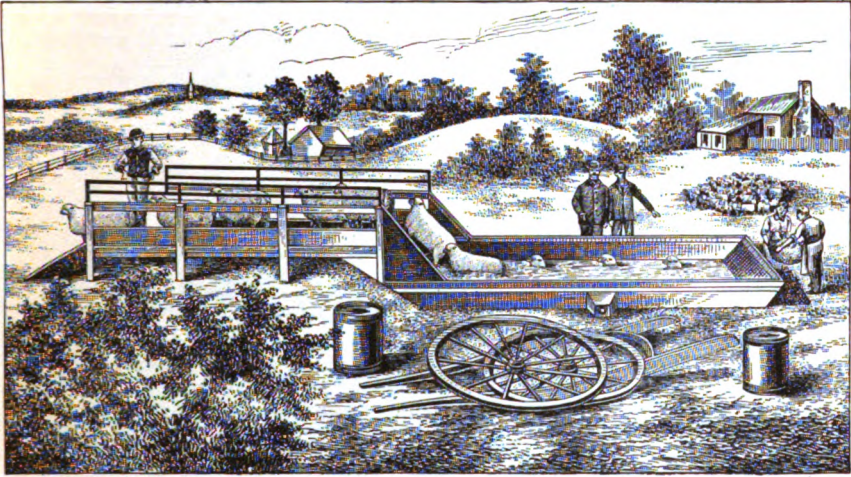


FIG. 34.—Portable vat unfolded and in use. (Copied from Armatage, 1896, *The Sheep Doctor*, p. 494.)

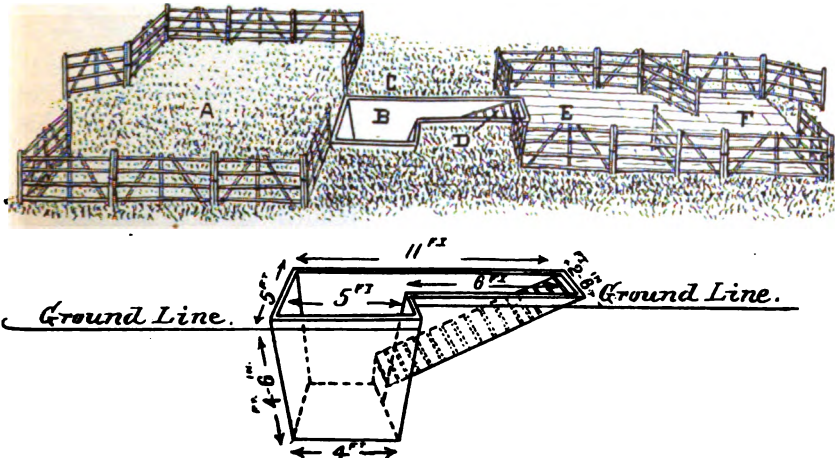


FIG. 35.—A small dipping plant: A, collecting yard; B, dipping vat; C, place for man with fork; D, incline, with cross cleats, to draining pens E and F. Lower diagram gives dimensions of the vat. (Copied from Sutherland's *Sheep Farming*, 1892.)

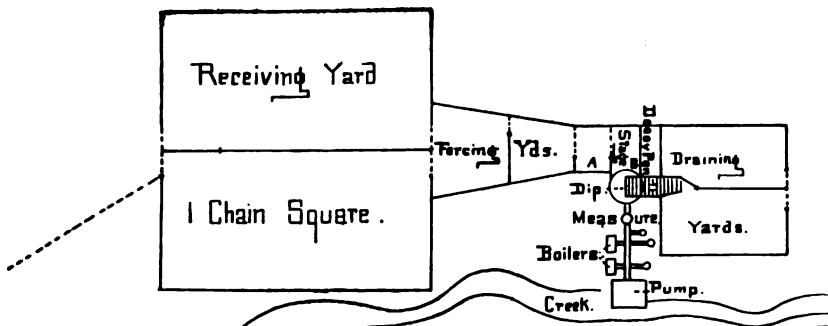


FIG. 36.—Receiving and forcing yards, with attached stage, decoy pen, vat, draining yards, etc. Scale 60 by 1½ inches. (Copied from Bruce's *Scab and Its Cure*, 1894, p. 17.)

in dip. A gate may be placed at the deeper part of the slant, if desired, in order to save labor. This gate should swing toward the

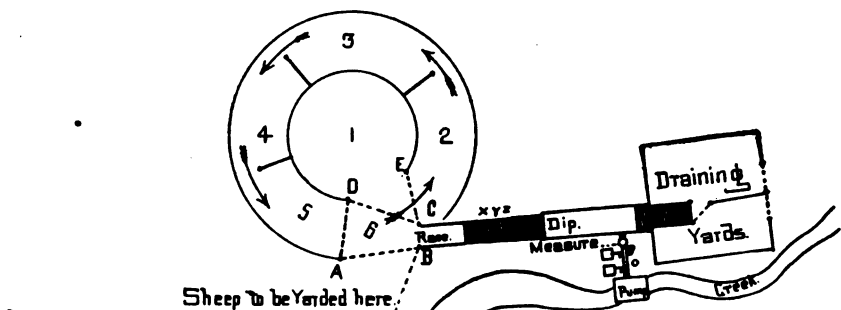


FIG. 37.—Australian circular receiving and forcing yards, with straight race or drive, the incline chute, straight vat, incline, two draining pens, etc. Scale 50 feet to 1½ inches, making the outer circle of the yards about 66 feet in diameter. (Copied from Bruce's Scab and Its Cure, 1904, p. 17.)

exit of the vat. Such a tank may be made of 1½-inch pine boards, with tongue and groove, and should be well pitched or painted.

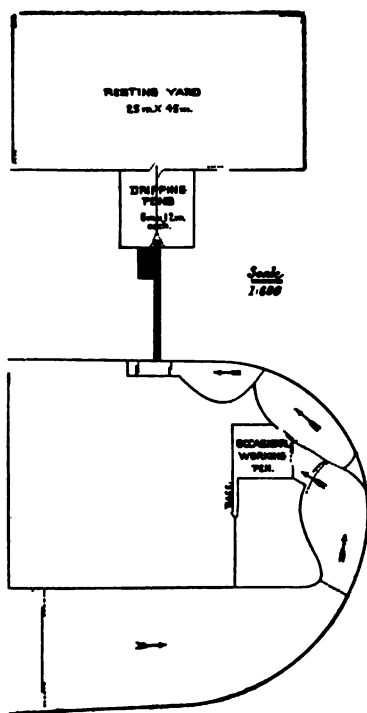


FIG. 38.—Argentine semicircular receiving and forcing yards, with a straight vat, draining pens, etc. The dimensions are given in the metric system: 1 m. (meter) equals 39.36 inches. (Copied from Gibson's History and Present State of the Sheep-Breeding Industry in the Argentine Republic, 1893.)

This plan of vat may be easily modified, if desired, so as to have a small dripping pen attached, as shown in figs. 31 and 32. In this modified plan an inclined platform is added to the vat shown in fig. 30 and a removable skeleton box is made to fit over it. While one sheep is being dipped another sheep is allowed to ascend the incline into the small dripping pen. When the sheep is sufficiently drained, the gate is opened, it leaves the pen, the gate is closed, the sheep in the vat enters the pen, and another sheep is placed in the vat.

A small portable vat used in some places is shown in figs. 33 and 34. Dipping in a vat of this kind may be thorough, but is tedious.

Another style of small vat suitable for holding three sheep at a time is shown in fig. 35. It is estimated that 1,500 sheep may be dipped in this tub in a single day. The dimensions of the plant are given in the diagram, and need no further explanation.

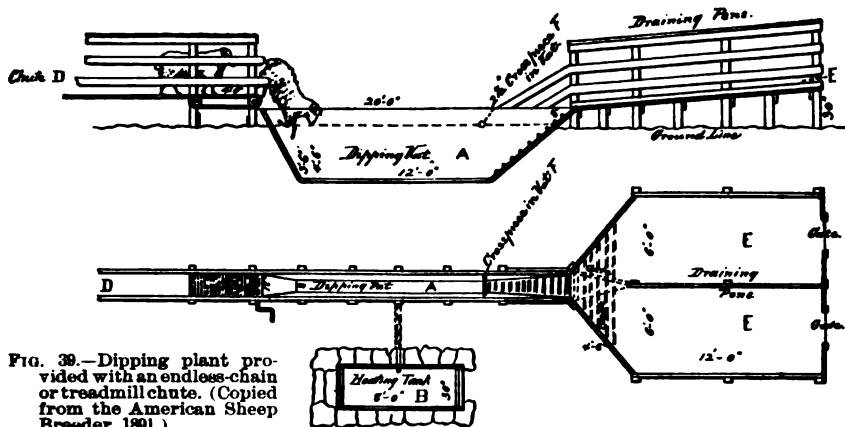


FIG. 39.—Dipping plant provided with an endless-chain or treadmill chute. (Copied from the American Sheep Breeder, 1891.)

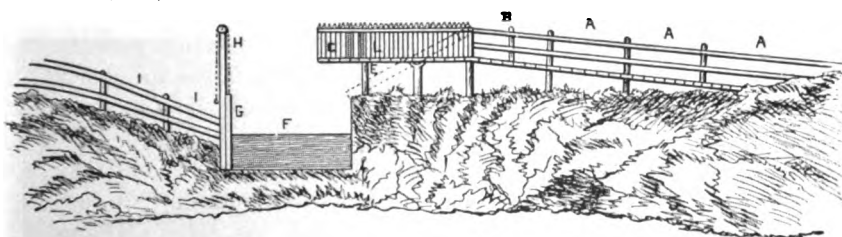


FIG. 40.—Dipping plant illustrating: A, collecting and forcing yards; B, straight drive; C, decoy pen in which several sheep are kept; D, dipping pen with pivoted floor; E, secured by a bolt; by withdrawing the bolt the sheep are precipitated into the square tub F; G, sliding gate through which the sheep pass from the tub to the draining pens J and K; L, channel for drip, conducting the ooze back to the vat. The lower diagram gives a surface view of the upper figure. (Copied from the Veterinarian, 1892, p. 333.)

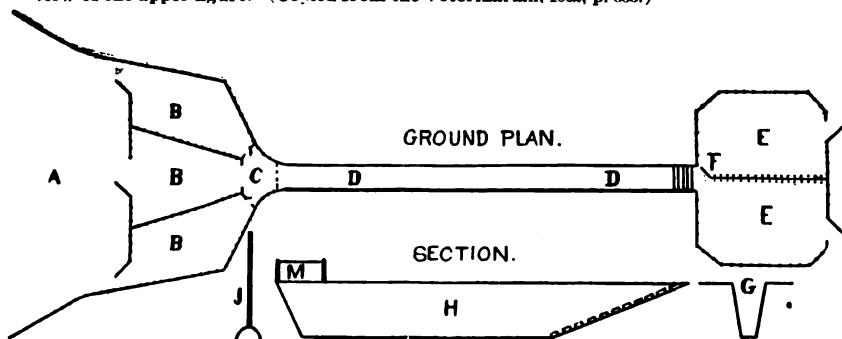


FIG. 41.—A, collecting yard for the sheep which are to be dipped; B, B, B, small pens leading to C, an inner pen with an inclined chute, or in which a man may stand to pass the sheep one at a time into the vat; D, D, the tub, which should measure from 20 to 120 feet long, 21 to 30 inches broad at the top, 6 to 9 inches broad at the bottom; M, board 2 feet high on each side of the entrance of the vat to catch the splash and to prevent the sheep from escaping; E, E, draining, or dripping, pens; F, swinging gate; G, cross section of the tub; J, crutch for keeping the backs of the sheep under the surface, and for catching or holding sheep in the dip. (This drawing is taken from the Agricultural Journal, III, 1891, p. 236; it was also published in the American Sheep Breeder, Feb. 15, 1892.)

MORE PERMANENT PLANTS FOR LARGER FLOCKS.

RECEIVING AND FORCING YARDS.

Where large numbers of sheep are to be dipped, it is necessary to build receiving pens close to the dipping vat. The number and size of the pens vary with the number of sheep to be handled. The yards may be either square or oblong, as shown in figs. 35 and 36, or they may be circular, as shown in fig. 37. The square or oblong yards are the more simple in construction and need no detailed description, as all details may be seen by consulting the diagrams. The circular yard, however, needs a word of explanation.

In using the circular yards (fig. 37) two natural habits of the sheep are turned to practical account, so as to lessen the work of driving, namely, the habit sheep have of "ringing" when disturbed in a yard, and the tendency they show to escape at the point where they enter an inclosure.

The flock is yarded at *AB* and finds its way into yards 1 and 2 through the openings *CD* and *CE*.

When these yards are full the gates *CD* and *AB* are closed to form yard 6. The sheep then circle through yards 3, 4, 5, and 6, coming to the point at which they entered and expecting to escape. When yards 3, 4, 5, and 6 are filled the other gates are closed, so that the sheep can not

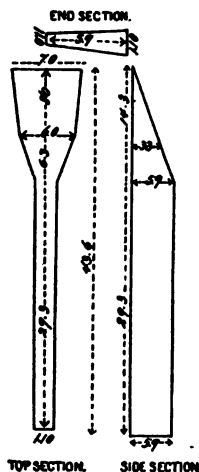


FIG. 42.—A straight vat known as the Australian sheep dipping tank.¹

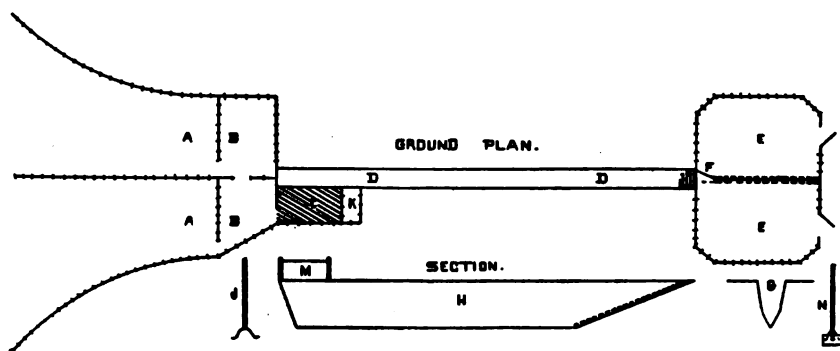


FIG. 43.—A somewhat similar straight swim taken from Sutherland's Sheep Farming: *A*, collecting pens; *B*, *B*, smaller pens; *C*, small pen at the side of the vat; *K*, decoy pen in which several sheep are placed to induce the sheep in pen *B* to enter pen *C*; *D*, *D*, a tub 50 to 60 feet long, 5 feet deep, 21 inches broad until 3 feet from the top, then narrowing to 6 or 8 inches at the bottom, as shown in the cross section, *G*; *M*, a board 2 feet high to catch the splash; the last 13 feet of the swim slants gradually, with cross cleats, to the draining pens, as seen in *H*; *E*, *E*, draining pens, worked alternately with the swinging gate, *F*; each pen measures 24 by 15 feet, and should slant toward the vat; *J*, crutch 5 or 6 feet long; *N* mixer for stirring the liquid.

¹This vat is in use at Tulcumbah station, New South Wales, and gives much satisfaction. The swimming race is 29 feet 3 inches long, 1 foot 10 inches wide at top, with gradual inward slope to 11 inches at the bottom, and 5 feet 9 inches deep; the landing stage (slant) is 14 feet 3 inches long (surface measurement), with a rise of 5 feet 9 inches in 14 feet 3 inches. To allow for any weak sheep,

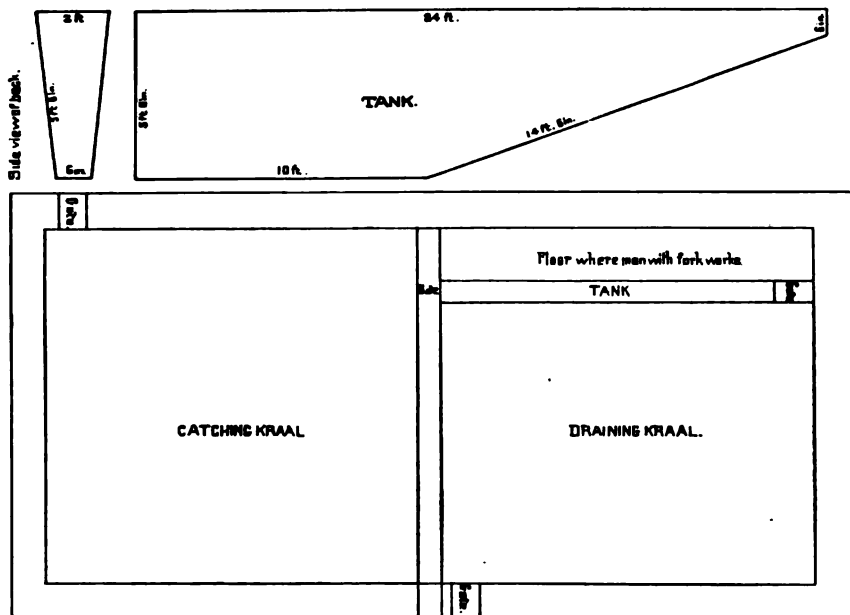


FIG. 44.—A dipping plant figured in the *Agricultural Journal*, 1894, p. 620, in use in South Africa.

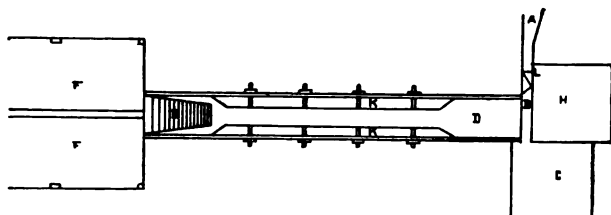
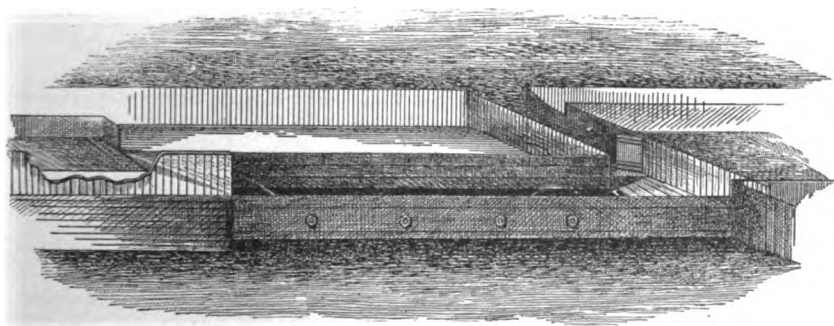


FIG. 45.—A dipping plant in use in Millard County, Utah: *A*, chute from the large corral; *B*, a sloping board over which the sheep in attempting to pass to the decoy pen *C* slide into the tank *D*; *K, K*, two pieces, 2 by 6 inches and 12 feet long, bolted lengthwise of the tank, leaving a 12-inch space in the middle of the dip through which the sheep must put their heads, preventing those in rear from riding those in front, at the same time keeping their backs under the dip. (Copied from Powers' *The American Merino*, 1887, p. 308.)

which stand in the way and block the others at the end of the swim, the landing stage opens out from 1 foot 10 inches at top and 11 inches at bottom to a width (top and bottom) of 6 feet at a distance of 6 feet 3 inches (longitudinally) from the end of the swimming race, and gradually widens for the remaining 8 feet of length to a width of 7 feet at the end.

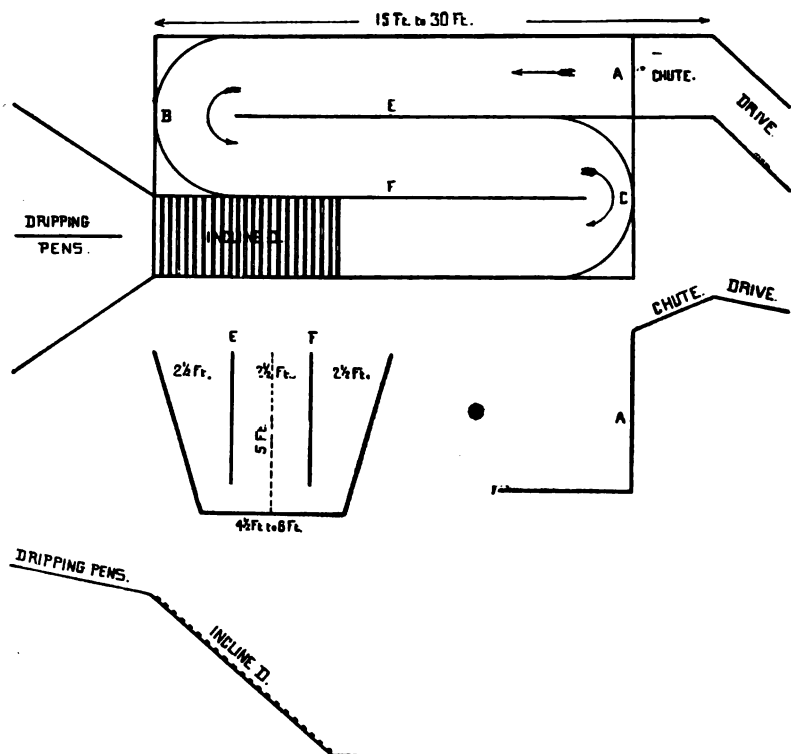


FIG. 46.—A triple vat. The various diagrams give surface view, cross section, vertical section of entrance to the vat, and vertical section of the incline and dripping pens.

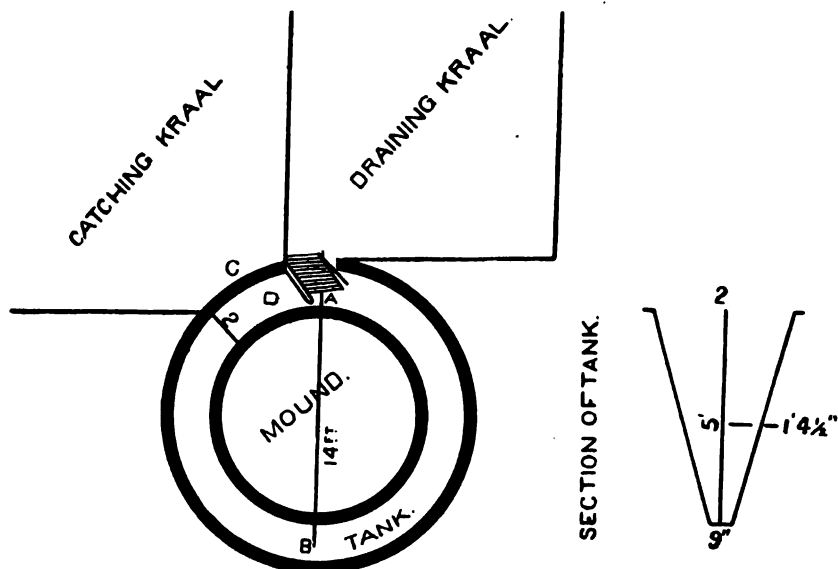


FIG. 47.—A circular dipping tank. (Copied from the Agricultural Journal, 1895, p. 119.)

return to yards 1 and 2. If the animals hesitate to enter yards 3, 4, 5, and 6, another natural tendency of the sheep may here be turned to account. A man jumps over the fence and runs through the flock in the opposite direction (6, 5, 4, 3) to that in which the animals are wanted to move. This will generally result in starting the sheep in the desired direction.

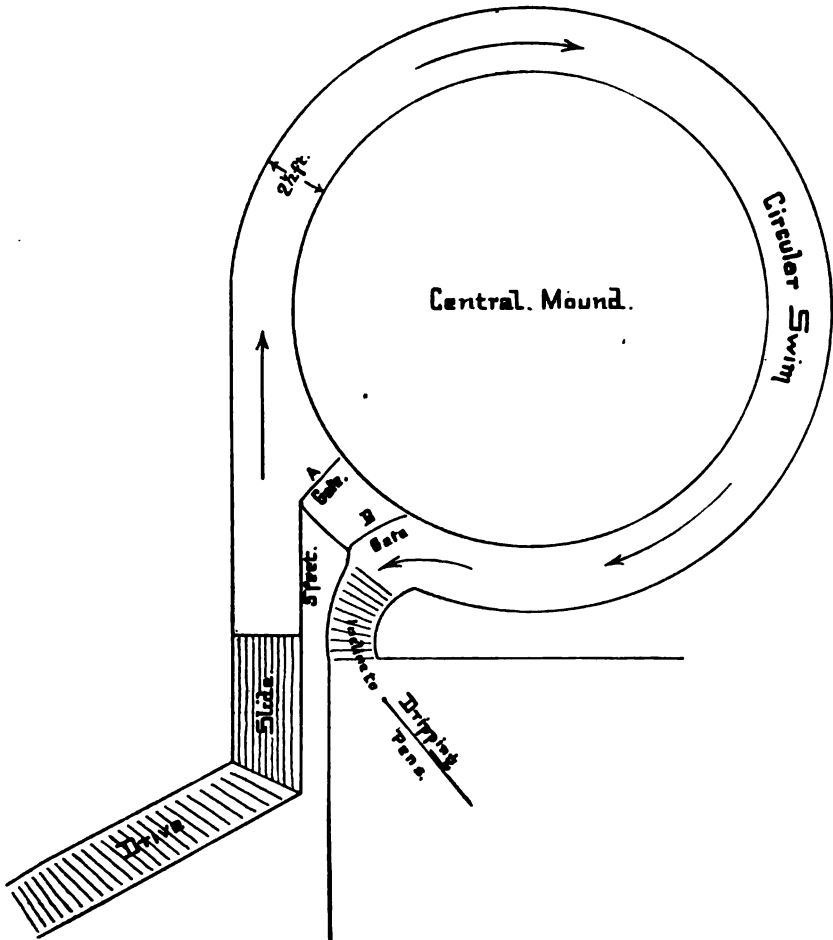


FIG. 48.—A circular dipping tank, with drive and slide.

From the exit of yard 6 (*BC*) there should be built a narrow run extending to the dipping vat. This run should be about 20 feet long by $2\frac{1}{4}$ feet wide, and should be provided with sides high enough, especially near the vat, to prevent the sheep from jumping over and thus escaping. These sides should be continued a short distance along both sides of the vat. The last 5 feet of this run should slant downward toward the vat at an incline of 25 to 30 degrees, and should be

smooth. By pouring upon it some of the dip it may be made slippery, so that the sheep will slide into the vat. If there is no natural incline toward the vat, an incline may easily be made by raising the floor of the run at a point 5 feet from the vat. The sheep will then pass up the incline x to the highest point y , then down the incline chute z .

Much time will be saved in dipping if the yards and run are arranged in such a way that the sheep in the race can not see the dipping vat. This can be accomplished by either of two simple

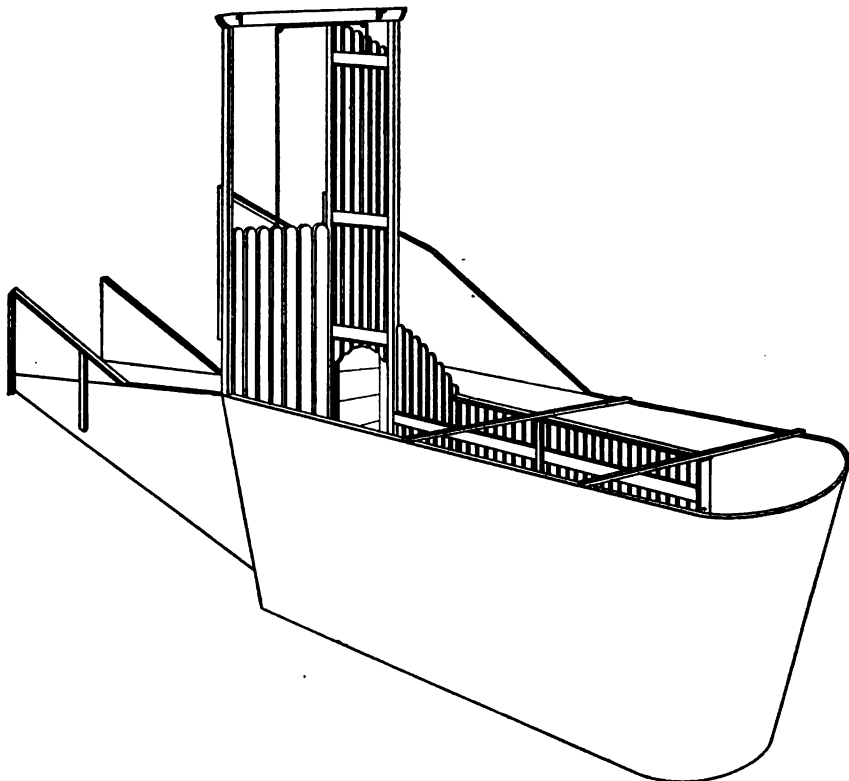


FIG. 49.—View of double oblong swim. (Consult also fig. 50.)

methods: First, the run, instead of being straight, may be built with a sudden angle at the point y (see fig. 37); the vat will then not be visible to the sheep ascending the incline x ; or, second, if a straight run is built, as shown in fig. 37, a loose curtain of bagging may be hung at the point where the run joins with the vat. This curtain will fall back into place as the sheep drop into the vat.

A modification of the circular pen is seen in fig. 38, taken from Gibson's (1893) History and Present State of the Sheep-Breeding Industry in the Argentine Republic.

CHUTES, OR SLIDES.

The most simple kind of chute is made by using an incline at the end of the run, as shown in fig. 37.

A second kind of chute in use is the endless-chain or treadmill chute, shown in fig. 39. Its construction can be seen from the diagram and need not be described in detail. This chute may be improved by building it on a slant toward the vat, in which case a bolt

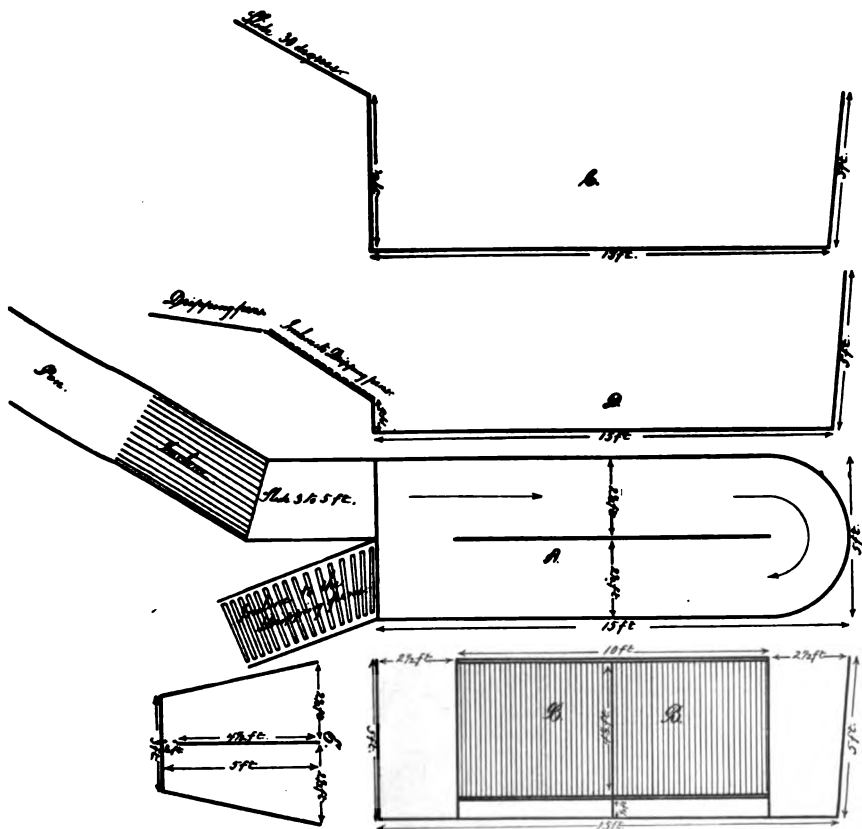


FIG. 50.—A double oblong swim: *A*, ground plan; *B*, side view of the middle partition; *C*, longitudinal section of the first swim; *D*, longitudinal section of the second swim, with incline; *E*, cross section of the entire vat, with partition in the center.

or other arrangement must be attached to stop the chute when desired; the weight of the sheep on the movable chute will help to carry the animals toward the vat.

A third chute in use is a pivoted platform, shown in fig. 40. The sheep walk out on the platform until they overbalance its free end, and then, when a sliding bolt is removed, fall into the tank. The structure of the chute may be seen from the figure. Accidents are

more likely to result from using this chute than from using the slant or the chain chute.

For dipping pregnant ewes some persons build a movable platform which can be lowered into the vat and raised at will.

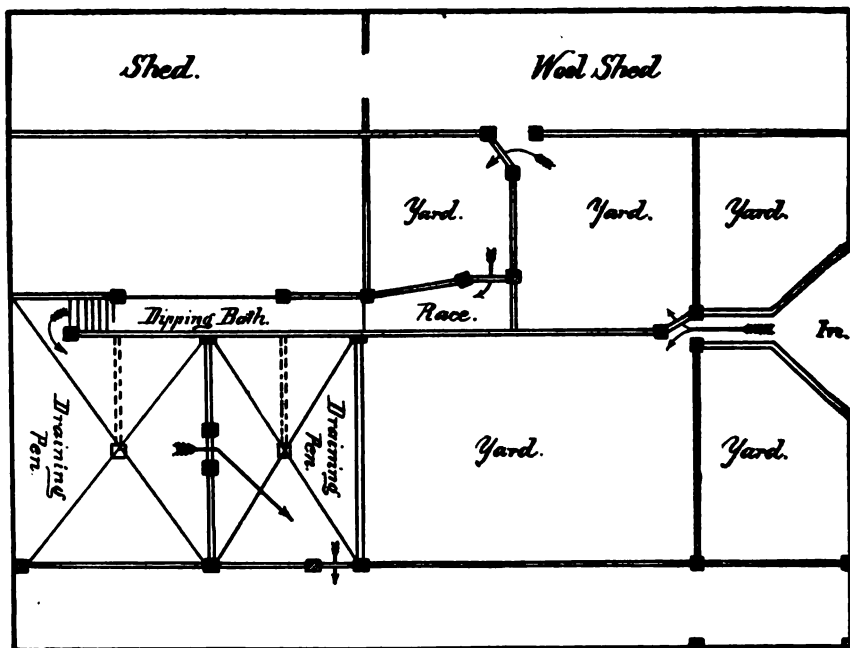


FIG. 51.—Ground plan of yards and vat. (Copied from Armatage, 1886, *The Sheep Doctor*.)

THE DIPPING VAT.

The dipping vat may be made on several different plans: The single oblong straight vat; the double or triple, with turns at the ends; the square; or the circular. In case of single oblong vats, time

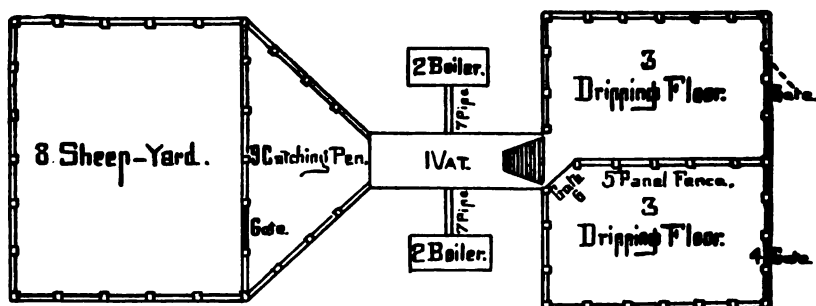


FIG. 52.—Ground plan of yards and vat. (Copied from Powers' *The American Merino*, 1887, p. 304.)

will be saved in dipping if a long vat is used, so that the animals may swim directly through without stopping, and then leave the tank. Very naturally, the longer the vat the more building material and ooze will be required. Vats are in use varying from 10 to 120 feet long.

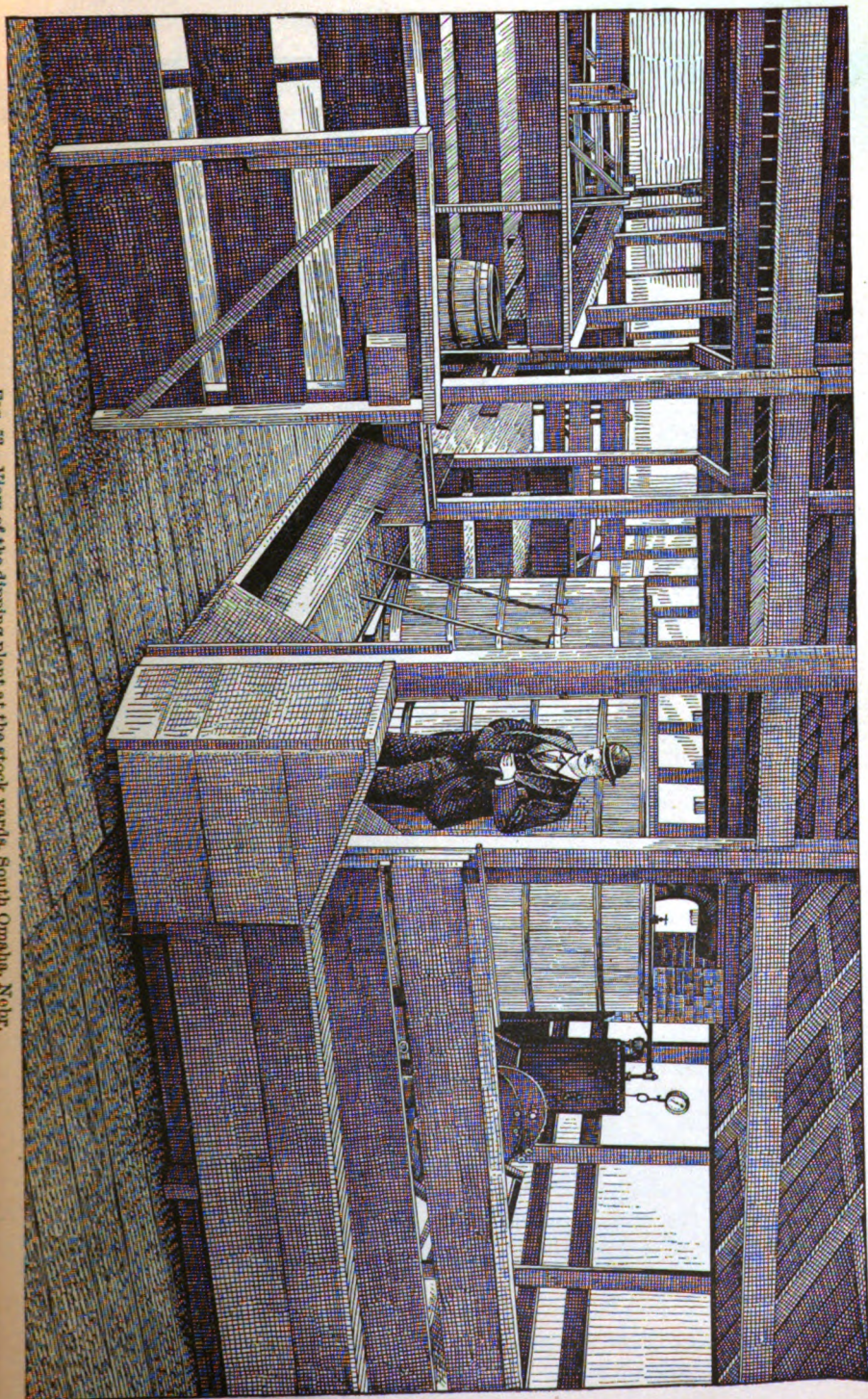


FIG. 33.—View of the dipping plant at the stock yards, South Omaha, Neb.

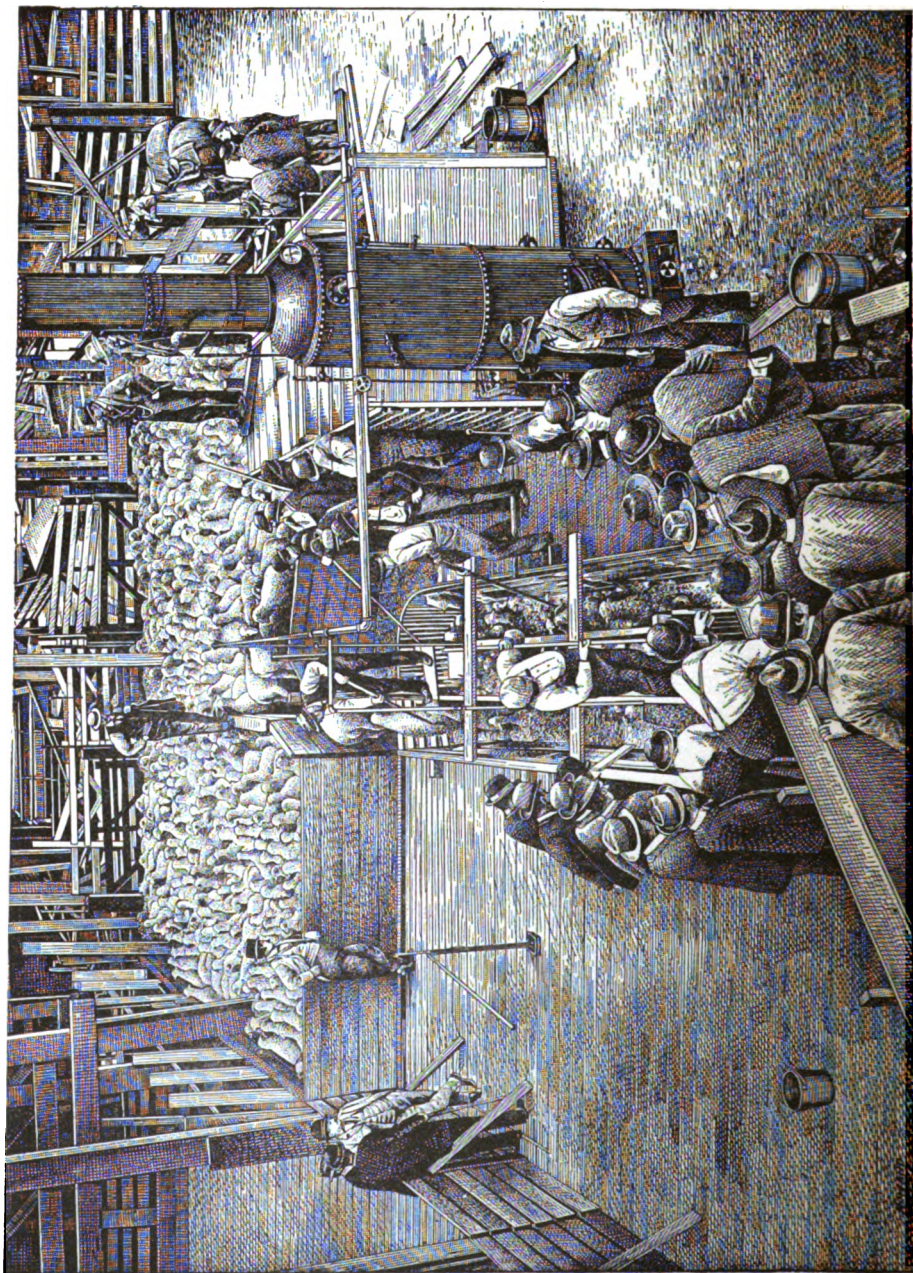


FIG. 54.—View of the dipping plant at the Union Stock Yards, Chicago, Ill. (This dipping plant, including vat, boiler, etc., cost about \$2,500.)

The single oblong vat.—Single oblong dipping vats are shown in figs. 36, 37, 38, 39, 41. These tanks should be made about $2\frac{1}{2}$ feet broad at the top, 9 inches broad at the bottom, and 4 to 5 feet deep. The length may be 20 to 120 feet, as desired. One end (the entrance) should be straight, as shown in figs. 42 and 44, or with a steep slant, as shown in figs. 39, 41, and 43, while the last 5 to 14 feet at the other end (exit) should have a gradual slant with cross cleats.

The square vat.—A square vat is shown in fig. 40. This tub should be 5 feet deep and large enough to hold 10 or 12 sheep at a time. The square vat does not present any particular advantages over narrow oblong vats, except that it gives the sheep an opportunity to swim around. This kind of a vat is not in very general use among large herders.

The triple vat.—In the triple vat (fig. 46) the sheep come through the run, or drive, and slide into the first vat at *A*; swimming in the direction of the arrows, they round the turns *B* and *C*, ascend the incline *D*, and enter the draining pens. The theory upon which this triple vat is used is that upon rounding the point *B* the sheep bend toward the left, thus crumpling the scabs on the left side and opening the wool on the right; upon rounding the point *C* they bend toward the right, crumpling the scabs of that side and opening the wool on the left. This is evidently a more theoretical than practical consideration.

Each run should be about 15 to 30 feet long and $2\frac{1}{2}$ feet broad; the tank should be $4\frac{1}{2}$ to 5 feet deep and 4 to $7\frac{1}{2}$ feet wide at the bottom. At the point *A*, where the sheep fall into the swim, it is best to have the floor of the first run $2\frac{1}{2}$ feet wide for a distance of 6 feet, in order to prevent accidents, but beyond that distance the floor may be narrowed in order to save the dipping fluid. If the partitions *E* and *F* are not made solid the ooze will circulate more easily and thus remain at a more even temperature; the boards should be close enough together, however, to prevent the sheep from catching their feet in the cracks. A gate should be arranged at *D*, so that the animals may be delayed in the ooze, if desired. (See also fig. 53 of the triple vat in use at the Chicago Stock Yards.)

The circular vat.—Some parties prefer a circular vat (fig. 47). The advantages set forth in favor of this are, first, a fewer number of men are required to attend to the animals in the tub; second, where it is desired to give any particular sheep an extra long swim, this may be done by quickly closing the gate *D* at the exit, thus compelling the animal to swim around again, without delaying the other sheep; third, by building a circular vat with a circumference of 30 feet the animals may be made to swim around two, three, or four times, thus gaining the advantage of a tank 60, 90, or 120 feet long, yet with a much smaller amount of building and dipping material.

The vat should be $2\frac{1}{2}$ feet broad at the top, 9 inches broad at the bottom, and 5 feet deep. To determine the circumference multiply the diameter by 3.1416.

Despite the advantages of the circular tank in saving material and obtaining the advantages of a long swim, there are two rather serious objections to it: First, in the vat shown in fig. 47 it is necessary to throw the animals in by hand, since a chute directed into the circle would lead to accident; second, the circular vat is much more difficult of construction than the straight vat.

These objections may, however, be overcome in several ways, still preserving all the advantages. If a circular vat is preferred and a chute is desired, the object may be attained by building a short, straight vat on a tangent to the circle, as shown in fig. 48. In this case two swinging or sliding gates, *A* and *B*, will be required.

The double vat.—All of the advantages of the circular vat may be combined with the easy construction of the straight vat by building a straight tub with a double channel, as shown in figs. 49 and 50, the second swim being prolonged in an incline to the draining pens. Such a vat may be constructed as follows:

Build an oblong tub 15 feet long, 5 feet deep, 5 feet wide at the top, and 3 to 5 feet wide at the bottom. Running lengthwise through the center, build an upright, partially open, partition 10 feet long and $4\frac{1}{2}$ feet deep (measured from the top of the tub), leaving an open space of $2\frac{1}{2}$ feet at each end and 6 inches at the bottom; this partition is supported by three uprights running to the floor of the tub, and cross supports may be placed on top of the tub at any point except near the entrance of the swim. A gate is hung at one end between the slide (entrance) and the incline (exit), and should extend above the tub, in order to prevent the sheep from jumping over the middle partition into the second swim; it should extend down to within about 6 or 12 inches of the floor of the tub. When this gate is closed against the middle partition the sheep will leave the vat by the incline to the draining pens; when it is closed against the incline, the sheep can be forced to swim around the tub two or three times, as desired. Or, in place of a swinging gate, two sliding gates may be arranged to run up and down in grooves, balancing each other or each balanced separately by weights. One of these gates is placed between the end of the vat and the end of the middle partition, the other is placed at the entrance of the incline to the draining pens.

By constructing the double vat and sending the sheep around three times there would result, first, a saving in the original cost of the tank when compared with a 90-foot straight swim; second, a saving in space; third, less than half as much dip would have to be kept warm at a time; fourth, less than half as much dip would have to be made up at a time; fifth, the residue after dipping would be reduced

and thus the loss decreased. It would, however, take a longer time to dip a large flock of sheep in such a vat than in a straight vat 90 feet long.

THE INCLINE TO THE DRIPPING PENS.

At the end of the vat an incline, with cross cleats, is built, so that the sheep may leave the dip of their own accord and enter the draining pens. A board fence, 2 feet high above the top of the vat, should run a few feet each side of this incline to prevent the sheep from escaping. These inclines are shown in figs. 39, 41, 43, and 44; the rise for fat heavy wool sheep must not be too steep, otherwise the exertion will be too great. In fig. 42 the incline is 5 feet 9 inches in a surface distance of 14 feet 3 inches. At the Chicago Stock Yards the incline is 9 feet.

Much labor will be saved if a hinged or, still better, a sliding gate is placed at the deepest portion of the incline. The sheep may thus be held in the dip as long as desired; when the time is up the gate is opened and the sheep enter the draining pens.

THE DRIPPING PENS.

There should be two dripping pens side by side (figs. 35, 36, 39, 41, and 51) with a swinging gate at the entrance; one is filled, the gate is then closed, opening the other pen; when the second pen is filled the first pen is emptied; or the pens may be in direct line with the vat (figs. 35 and 40).

These pens should have a slight incline toward the tub so that the dripping ooze will run back to the tub. A good plan is to build the incline from the sides toward the center fence; under the fence build a partially covered gutter inclining to the tub; the cover of the gutter should be removable to allow cleaning; at the end of the gutter nearest the tub place a grating to catch the wool and droppings, thus preventing these materials from being washed into the dip.

SHELTER FOR THE DRIPPING PLANT.

The vat, boilers, and dripping pens should be under cover, and it will be well to extend the cover over the drive and the forcing pens.

ARRANGEMENTS FOR CLEANING.

Cleaning the plant may be facilitated if the following suggestions are observed: It is well to have one end of the vat slightly lower than the other end, so that the ooze will run toward that point when the tub is being emptied. If the entire floor of the collecting pens is made of brick, cement, or boards, and inclines slightly toward one or two points, the yards may be more easily cleaned by means of a hose and stream of water. If this plan is adopted, there should be an upright

baseboard or a solid wall of concrete or brick a few inches in height running around the edge of the entire pen. If there is direct sewer connection for the vat a trap or manhole should be made to catch the droppings and the tags of wool, otherwise the sewer pipe will become obstructed.

BOILING, INFUSING, AND SETTLING TANKS.

The arrangement of the boiling tanks depends upon two factors in particular: First, upon the kind of dip used; second, upon the arrangement adopted for keeping the bath at the proper temperature.

In case a steam pipe is placed near the floor of the dipping vat in order to keep the ooze at its proper temperature while dipping, the vat itself may be used for heating water. Clear water is run into the vat and the steam turned on full force until the proper temperature is obtained. If a carbolic or a prepared tobacco dip is used, the material may then be mixed in the vat if desired. Even in this case, however, it is best to provide a separate boiling tank for heating and preparing fresh ooze to replace the dip as it is used up.

These boiling tubs may be made of wood or iron, according to the facilities at hand. If steam is to be had, the square or round wooden boiling tub may be used, and an open steam pipe run into it to heat the water. If the steam pipe can not be used, either in the vat or in the boiling tanks, iron tanks should be provided. The iron tanks are set in brick or stone frames, with a fireplace below. It is best to have two tanks, each with a capacity of about 400 gallons.

If a homemade tobacco dip is prepared from the leaves there should also be provided two iron infusing caldrons, each with a cover and with a capacity of 80 to 120 gallons. The infusion is prepared in these smaller tanks, while the bulk of the water is heated in the boiling tanks or in the swim itself.

If a lime-and-sulphur dip is used it is absolutely necessary to provide some means for settling the mixture, in order that the bath may be free from sediment. This may be done in two ways. The better way is to have separate settling tubs provided with bungholes or pipes three or four inches from the bottom. After the mixture is thoroughly boiled it is pumped into the settling tubs and allowed to remain there until it is perfectly free from sediment; the clear liquid is then run into the dipping vat and diluted with warm water to the proper strength. Or the boiling tanks may also be used as settling vats. A pipe with elbow joint is run into the boiling tank three or four inches above the bottom; the opening of the pipe should point sidewise, not up. After boiling the proper length of time the fire is removed and the liquid allowed to stand until clear; only the clear ooze is drawn off, the sediment remaining on the floor of the boiling tank. .

MEASURES.

The capacity of the vat should be marked at different depths. The capacity of the boilers should also be marked in the same way. If these are marked for every 100, 200, 300, or 500 gallons (according to the amount of dipping to be done), separate measuring tanks will be unnecessary. In case the tanks are not marked a separate measuring tank should be provided.

If a homemade tobacco dip or a lime-and-sulphur dip is used, a set of scales is necessary. To guess at weights in mixing lime and sulphur may result in too strong a dip.

PUMPS.

A portable pump will be found of great use in filling and emptying tanks.

FEDERAL LAWS AND REGULATIONS RELATIVE TO SHEEP SCAB.

As the scab of the sheep is unquestionably a contagious disease, it is unlawful to ship sheep so affected from any State, Territory, or the District of Columbia into any other State, Territory, or the District of Columbia. The penalties for such shipment of diseased sheep are heavy, as will be seen from an examination of sections 6 and 7 of the act approved May 29, 1884, which are as follows:

SEC. 6. That no railroad company within the United States, or the owners or masters of any steam or sailing or other vessel or boat, shall receive for transportation or transport, from one State or Territory to another, or from any State into the District of Columbia, or from the District into any State, any live stock affected with any contagious, infectious, or communicable disease, and especially the disease known as pleuro-pneumonia; nor shall any person, company, or corporation deliver for such transportation to any railroad company, or master or owner of any boat or vessel, any live stock, knowing them to be affected with any contagious, infectious, or communicable disease; nor shall any person, company, or corporation drive on foot or transport in private conveyance from one State or Territory to another, or from any State into the District of Columbia, or from the District into any State, any live stock, knowing them to be affected with any contagious, infectious, or communicable disease, and especially the disease known as pleuro-pneumonia: *Provided*, That the so-called splenic or Texas fever shall not be considered a contagious, infectious, or communicable disease within the meaning of sections four, five, six, and seven of this act, as to cattle being transported by rail to market for slaughter, when the same are unloaded only to be fed and watered in lots on the way thereto.

SEC. 7. That it shall be the duty of the Commissioner of Agriculture to notify, in writing, the proper officials or agents of any railroad, steamboat, or other transportation company doing business in or through any infected locality, and by publication in such newspapers as he may select, of the existence of said contagion; and any person or persons operating any such railroad, or master or owner of any boat or vessel, or owner or custodian of or person having control over such cattle or other live stock within such infected district, who shall knowingly violate the provisions of section six of this act, shall be guilty of a misdemeanor, and, upon conviction, shall be punished by a fine of not less than one hundred dollars nor more than five thousand dollars, or by imprisonment for not more than one year, or by both such fine and imprisonment.

The provisions of this statute are very specific and clear, and there can be no possible doubt of their application to the disease under consideration. Congress has, nevertheless, gone still further by way of emphasizing this application, and has particularly directed the attention of the Department of Agriculture to a few important diseases, including sheep scab, by the following clause, which has been repeated in the appropriation act for a number of years:

* * * and the Secretary of Agriculture is hereby authorized to use any part of this sum he may deem necessary or expedient, and in such manner as he may think best, in the collection of information concerning live stock, dairy and other animal products, and to prevent the spread of pleuro-pneumonia, tuberculosis, sheep scab, and other diseases of animals, and for this purpose to employ as many persons as he may deem necessary.

Acting in accordance with this legislation, the following orders have been made and promulgated by the Secretary of Agriculture:

**REGULATIONS PROHIBITING THE TRANSPORTATION OF ANIMALS AFFECTED WITH
HOG CHOLERA, TUBERCULOSIS, OR SHEEP SCAB.**

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., December 13, 1895.

Notice is hereby given that under the law relating to control of contagious and infectious diseases of animals, the regulations of the Bureau of Animal Industry dated April 15, 1887, are hereby amended by additional section, as follows:

SEC. 15. Animals affected with hog cholera, tuberculosis, or sheep scab shall be considered animals affected with contagious or infectious diseases as designated by the law and the regulations of the Bureau of Animal Industry, and shall not enter into interstate trade nor be brought into contact with other animals intended for such trade. Such affected animals shall not be permitted to enter any stock yards or other places where animals are handled for interstate trade, and when so found at such places shall be condemned, tagged, and placed in quarantine by inspectors or employees of said Bureau until proper disposition is made of same.

Stock-yard companies, transportation companies, or others receiving or handling such diseased animals are hereby required to thoroughly disinfect such portions of their premises or property as contained such diseased animals, subject to the approval of the inspectors of said Bureau.

Such diseased animals so quarantined shall not be removed therefrom except by written permit of the inspector in charge. When such diseased animals are found, inspectors shall make careful inquiry as to shipper and owner of same, and transportation company handling same, for the purpose of instituting prosecution under the law provided in such cases.

All animals entering stock yards where inspection exists shall be carefully inspected and those affected with the contagious diseases above mentioned shall be condemned and tagged, and when so condemned shall not be shipped therefrom or enter into the interstate trade; and all violations of this regulation should be immediately reported to the Chief of the Bureau of Animal Industry for institution of prosecution according to law.

J. STERLING MORTON, *Secretary.*

(B. A. I. ORDER No. 5.)

TRANSPORTATION OF SHEEP AFFECTED WITH SCABIES.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 18, 1897.

To the Managers and Agents of Railroads and Transportation Companies of the United States, Stockmen, and Others:

In accordance with section 7 of the act of Congress approved May 29, 1884, entitled "An act for the establishment of a Bureau of Animal industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," and of the act of Congress approved April 23, 1897, making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1898, you are hereby notified that the contagious disease known as sheep scab, or scabies

of sheep, exists among sheep in the United States, and that it is a violation of the law to receive for transportation or transport any stock affected with said disease from one State or Territory to another, or from any State into the District of Columbia, or from the District into any State. It is also a violation of the law for any person, company, or corporation to deliver for such transportation to any railroad company, or master or owner of any boat or vessel, any sheep, knowing them to be affected with said disease; and it is also unlawful for any person, company, or corporation to drive on foot or transport in private conveyance from one State or Territory to another, or from any State into the District of Columbia, or from the District into any State, any sheep, knowing them to be affected with said disease. All transportation companies and individuals shipping, driving, or transporting sheep are requested to cooperate with this Department in enforcing the law for preventing the spread of the said disease. Inspectors of the Bureau of Animal Industry are directed to report all violations of this act which come to their attention.

In order to more effectually accomplish the object of the above-mentioned laws, it is hereby ordered that any railroad cars, boats, or other vehicles, which have been used in the transportation of sheep affected with said disease, shall be immediately cleaned and disinfected by the owners or by the transportation companies in whose possession said cars or vehicles may be at the time the animals are unloaded, by first removing all litter and manure which they contain, and then saturating the wood-work with a 5 per cent solution of crude carbolic acid in water. Inspectors of the Bureau of Animal Industry are directed to see that this order is carried into effect.

JAMES WILSON, *Secretary*.

NOTICE OF ENFORCEMENT OF THE LAW.

These orders constitute the notice as to the existence of the disease, and call the attention of transportation companies, stockmen, and others to the provisions of the law. Anyone who violates this law or the regulations made in accordance therewith will be subject to the penalty, and can no longer plead ignorance or lack of notice. Owing to an insufficient number of inspectors during the past years, the Department has not been as active in seeking out and prosecuting offenders against this statute as the importance of the matter demands. There have undoubtedly been many shippers, as well as transportation companies, who have rendered themselves liable to prosecution and who have not been proceeded against, but it should not be concluded that, because the penalty has been escaped in a few instances, this immunity will continue. The inspection force is now competent to deal with this subject, and the Department of Agriculture will hereafter take such steps as may be required to stop the dissemination of this contagion through the channels of interstate commerce. In such action the Department will have the assistance and cooperation of all good citizens, and particularly of all of those who are interested in the sheep industry. There is probably no disease in this country, with the exception of hog cholera, which causes greater losses among the domestic animals than does sheep scab, and at the same time none which is so easily, cheaply, and certainly cured. It is, therefore, dis-

creditable to the intelligence and practical qualities of our people that this contagion should still be rampant and continually distributed through the channels of commerce.

All sheep owners who expect to ship or drive their sheep across State lines should assure themselves before the animals are started that scab does not exist among them. In case symptoms of the disease are discovered, the animals should be dipped and cured before they leave the farm. The information in this bulletin is sufficient to enable anyone to cure this disease with a minimum of trouble and expense. There will hereafter be no excuse for those who claim that they are unacquainted with the nature of the disease or with the methods of treatment.

EFFECT OF MEAT-INSPECTION REGULATIONS.

Sheep suffering from scab are affected by the meat-inspection law and regulations, as well as by those mentioned above. Section 6 of these regulations provides as follows:

6. The inspector in charge of said establishment shall carefully inspect all animals in the pens of said establishment about to be slaughtered, and no animal shall be allowed to pass to the slaughtering room until it has been so inspected. All animals found on either ante-mortem or post-mortem examination to be affected as follows are to be condemned and the carcasses thereof treated as indicated in section 7:

- (1) Hog cholera.
- (2) Swine plague.
- (3) Charbon, or anthrax.
- (4) Rabies.
- (5) Malignant epizootic catarrh.
- (6) Pyæmia and septicæmia.
- (7) Mange, or scab, in advanced stages.
- (8) Advanced stages of actinomycosis, or lumpy jaw.
- (9) Inflammation of the lungs, the intestines, or the peritoneum.
- (10) Texas fever.
- (11) Extensive or generalized tuberculosis.
- (12) Animals in an advanced stage of pregnancy or which have recently given birth to young.
- (13) Any disease or injury causing elevation of temperature or affecting the system of the animal to a degree which would make the flesh unfit for human food.

Any organ or part of a carcass which is badly bruised or affected by tuberculosis, actinomycosis, cancer, abscess, suppurating sore, or tapeworm cysts must be condemned.

Instructions have been issued to inspectors to rigidly enforce these regulations. Sheep in an advanced stage of scab are feverish and unfit for food, and their carcasses will be condemned. Shippers who forward animals for slaughter in this condition will be likely to lose heavily upon them, as they will be subject to quarantine and condemnation. This is an additional and important reason for curing affected animals before they leave the feeding place.

Failure to observe the laws and regulations as they relate to this disease will in many cases result in hardship and loss. In order to avoid such unpleasant results so far as possible and to facilitate the control of the disease this article has been prepared. It is believed that there has been brought together herein all the information needed by the sheep owner to successfully combat this scourge of American flocks.

INVESTIGATIONS RELATIVE TO SHEEP SCAB.

The Department of Agriculture, acting under authority given it by law, issued the order to be found on page 151, prohibiting the transportation of animals affected with hog cholera, tuberculosis, or sheep scab. Inspectors were placed in the field to enforce these regulations so far as possible, and their reports are embodied in this article.

During the spring months of 1897 the Bureau of Animal Industry received information from various sources that its regulations were not being fully complied with, especially that portion which relates to the transportation of sheep affected with scab. It was stated that some transportation companies were not only aware that sheep which they carried were affected with scab, but that they shipped them around points where the Bureau inspectors were located to the feed yards in the vicinity of Chicago. It was therefore necessary for the Bureau to make an investigation of this charge, and this was at once instituted. The inspectors who were detailed upon this work were directed to visit sheep-feeding stations at certain points, find how many sheep are being fed or are fed during the season, the condition when received and when shipped, the points whence the sheep came; and, further, to report upon the condition of the feeding stations—their vats for dipping, if any, the size of pastures and yards, and the sanitary condition of the sheds. These reports form the principal part of this article.

REPORT FROM DR. N. P. HINKLEY.

On April 17, 1897, Dr. N. P. Hinkley, inspector in charge at Buffalo, N. Y., informed the Bureau of Animal Industry that he was quite sure that sheep affected with scab were being delivered in that city, sometimes escaping the vigilance of the inspectors, and that they were coming from the States of Ohio, Iowa, and Michigan. The conditions which admitted of this elusion of the authorities were promptly rectified. An inspector was stationed at the stock yards, and such instructions were given him as to insure a thorough inspection of every head of sheep arriving there. This inspector began his duties at the yards April 1, and on that first day detected and condemned 195 head of scabby sheep and for the next week condemned from one to five double-deck loads. While most of these diseased animals could be detected only by a person of experience in scabies, and showed evidence of recent treatment, yet on each one condemned was found the live mite (*Psoroptes communis* var. *ovis*). All these sheep were from Michigan.

All of the yards, chutes, alleys, scale yards, and cars with which these animals had come in contact were thoroughly cleaned and disinfected, under the supervision of the inspector in charge.

Dr. Hinkley was afterwards informed that a certain commission merchant of Buffalo had 30,000 head of sheep at Pontiac, Mich., which he was feeding for the Buffalo market. He was also informed that these sheep had been dipped twice and were supposed to be cured; but shipping them to Pontiac in cars which evidently had not been properly cleaned and disinfected again developed the disease.

The Bureau of Animal Industry, under date of April 22, directed Dr. Hinkley to go to Pontiac, Mich., and make a careful inspection of the sheep referred to by him. If any were found to be affected with the scab he was directed to notify the railroads and also the owner of the regulations issued by this Department in accordance with law. The report of this inspector follows:

BUFFALO, N. Y., May 7, 1897.

SIR: As requested in your instructions of the 22d ultimo, I have visited the town of Pontiac, Mich., and vicinity, and made a careful inspection of different flocks of sheep which are being fed there for this and other markets, and which I had reason to believe were affected with the scab.

I arrived at Pontiac on April 27, and after some inquiries located several different ranches where sheep were being fed. The first one visited was about 7 miles distant, and there were there about 4,500 head. They were confined in well-built sheds, but very much crowded for room. It was explained that the purpose of keeping these animals in such close quarters was to hasten their fattening by not allowing them to move around any more than was absolutely necessary. They were well fed, with good, wholesome food—roots, clover hay, corn meal, and wheat bran, with a good supply of water. The sanitary condition of the buildings was fairly good, yet I found about 25 per cent of this herd affected with scab (*Psoroptes communis* var. *ovis*) in a mild form. None of them were in an advanced condition or seemed to suffer inconvenience, yet a careful inspection disclosed the presence of the disease upon some part of the body.

These sheep had been purchased at different times, with a number of others (which he had sold), on the Chicago market last fall. They were "Mexican" sheep, and were more or less affected with scab when they were purchased. They had been dipped in the fall in a preparation of Little's dip (a crude carbolic-acid preparation) and were supposed to be cured, as no signs of scab had been seen among them until January 1, 1897. At this time they were again dipped and again supposed to be cured, and the owner was surprised when he learned that the disease still existed in his flock. On inquiry, I found that the necessary precaution of thoroughly cleaning and disinfecting all of his buildings after dipping his sheep had not been taken, and consequently they again became infected as soon as they were placed back in the contaminated buildings.

The owner of the flock was under the impression that dipping the sheep once was all that was actually necessary to destroy the parasite, thus ridding the animal of the disease, and was not aware that the unhatched larvæ were not destroyed by this dip. This error, with the uncleared and contaminated sheds, was the cause of the reinfection of his flock. I therefore suggested a thorough and systematic cleaning and disinfection of all the buildings, sheds, and yards with which the sheep came in contact, collecting all unused bedding, offal, tags of wool in or attached to the woodwork, carting the same away to be cremated; then to thor-

oughly wash all woodwork with a hot carbolized wash, and to whitewash afterwards with carbolized lime; then to shear the animals and dip them twice, at intervals of about seven to ten days; to closely watch all the sheep afterwards and isolate and quarantine, and repeat the dipping of any that showed signs of scab. I also notified the owner not to ship any sheep which had scab or had been exposed to the contagion under penalty of prosecution. He signified his willingness to obey the rules and regulations of this Department covering this matter, and was grateful to the Department for sending an inspector there to aid him in stamping out the disease.

I would also report that when I arrived at this farm four cars were loaded with sheep which were slightly affected with scab. These were to be sent to the Buffalo market. I advised that they be unloaded and returned to the sheds and the cars properly cleaned and disinfected. This was cheerfully complied with.

The next farm or feeding sheds I visited was about 6 miles from Pontiac. Here I found a very extensive plant—large, well-built sheds, shearing houses, feed rooms, wool rooms, etc. The farm was well watered with a small river flowing directly through the entire farm. In these sheds I found 25,000 sheep all closely crowded together. The feed was the same as for the previous flock—clover hay, roots, corn meal, and wheat bran in plentiful quantities. However, I found scab to the same extent (about 25 per cent) but in a more advanced form.

The owner informed me that these sheep were principally from Colorado, but some were "Mexican," and that quite a number were affected with scab at the time he purchased them last fall. He had dipped them twice in the fall and had not seen any signs of scab until it broke out this spring. He had been trying hard to stamp it out of his flocks by dipping, using Little's dip. A large and substantial dipping trough had been built, but, as was the case on the farm first mentioned, the pens, sheds, etc., had not been cleaned and disinfected, and other necessary precautions were not taken, hence his failure in ridding his animals of scab. I was also informed by this owner that he had lost between 800 and 1,000 head of sheep during the past nine months and he thought their death was due to scab.

I remained a day and a half at this farm, advising and suggesting the necessary systematic quarantining of the entire farm until the disease was stamped out. I advised a thorough cleaning and disinfection of all his pens, sheds, yards, shearing sheds, car chutes, etc.; also instructed him in the proper manner of dipping, shearing, and redipping. He readily consented to all of this, and in fact began at once the work while I was there. He was notified not to ship any sheep having scab or which had been exposed to scab.

The superintendents of the three railways were visited and notified not to receive any animals affected with scab or any contagious disease. They were also directed to disinfect thoroughly all of their cars that carried sheep, and to clean and disinfect their chutes and loading yards at least once a week. These officials treated me courteously and promised to have my instructions carefully carried out.

Several other small farms or feeding sheds in the vicinity of Pontiac were visited, where I found from 50 to 200 head on each being fed for market. All these sheep were carefully examined but no scab could be found.

I then returned to Detroit and visited the stock yards there, and was informed by the superintendent of the stock yards that sheep affected with scab were frequently brought into the yard for shipment to the Buffalo and Chicago markets. Thereupon I called upon the superintendents of the several railroads and transportation companies handling or trafficking in sheep and formally notified them not to receive, ship, or handle sheep affected with any contagious disease, leaving with each a copy of the rules and regulations of this Department. I would report

that all of the above officials seemed anxious to comply with the rules and regulations concerning the handling, shipping, etc., of animals having scab or any other contagious disease.

I would also add that since my arrival home there has been only now and then a sheep affected with scab coming into our market; and I am of opinion that, if all the precautions and instructions I have given to the owners of sheep at their ranches, where the disease was found, is carried out, it will be the means of stamping out the disease completely in that locality.

Respectfully,

Dr. D. E. SALMON,

Chief of Bureau of Animal Industry.

NELSON P. HINKLEY, *Inspector.*

On June 4, Dr. Hinkley supplemented the above report as follows:

I desire to report to you that all sheep received at the Buffalo stock yards for the past five weeks and up to date from Pontiac, Mich., and vicinity are found to be in a healthy condition and free from scab.

REPORT FROM DR. T. A. GEDDES.

The Chief of the Bureau, under date of May 22, 1897, addressed the following instructions to Dr. T. A. Geddes, at Davenport, Iowa:

I wish to obtain as full information as possible concerning the interstate shipment of sheep affected with scab. In order to avoid having such sheep subjected to the regulations of the Bureau, I am informed that they are being shipped around points where there are no inspectors stationed, such as Kansas City and Omaha, to certain feeding stations, and there fed for a time and shipped to Chicago and the East. I desire that you ascertain what roads usually carry such sheep, and whether they do so with the knowledge that they are diseased sheep; the condition of these feeding stations and the sheep at them; the owners of the same; where the sheep originated; whether they were diseased when shipped; and all the information which you can obtain pertaining thereto. If diseased sheep are found, you will deliver to the owner a copy of the order relating to the shipment of same, and also deliver copies to the railroad agents at that point. * * *

In accordance with these instructions, Dr. Geddes visited several feeding stations near Chicago and reported his observations to this Bureau from time to time.

At Streator he found one farm of 2,200 acres of timber and farm land, with an excellent stream of water running its entire length, making a perfect grazing farm for sheep. The owner was feeding 2,000 of his own sheep here on June 4. About May 1, 900 head had been received from Utah; the others came from Texas and Kansas City. A careful examination revealed 9 which were affected with scab. These cases were in the early stages. On June 3 there was received at this farm 900 head from Hutchinson, Kans., but these were reloaded the same day. Four in the lot were found, upon close inspection, to be affected with scab. On the same day 500 head were received from Texas, but these were found to be free from disease. Twenty-five hundred more came on June 4 from Midland, Tex., and were also free from scab. The owner of the last-mentioned flock informed Dr. Geddes that the railway companies would take sheep

suffering from scab, if the owner would take the risk of their being stopped by a Government inspector.

Most of the sheep received at the above farm remain from a week to ten days and are then shipped to Chicago. Another farm was visited at Streator, where there were 2,200 sheep from Laredo, Tex. These had gone to Chicago by mistake and were dipped there, and were in good condition and free from disease. There was also on this farm a flock of 600 sheep from Colorado, which had been purchased in Kansas City. Three only of this lot were found affected with scab.

Dr. Geddes found it almost impossible to get from the agents of the railway companies any information regarding the shipment of sheep, and for this reason was hampered in his work at Streator.

At 3 miles from Aurora the inspector found three feeding sheds, each 300 feet long and 200 feet wide. They are well ventilated and in good sanitary condition so far as cleanliness is concerned. This station has a well-equipped dipping vat. About 70,000 sheep were received here weekly during the ten weeks prior to June 15. The gentleman in charge of this feeding station stated that very little scab affected the flocks which had been there. He also stated that all sheep showing signs of the disease were dipped, using any kind of dip the shippers desired. The lime-and-sulphur dip was used principally.

The inspector visited Lafox on June 18 and found about 18,000 head feeding there. These were bought at the stock yards at Omaha, Nebr. No scab was detected. The proprietor of this station handles about 500,000 sheep annually, most of them coming from Colorado, New Mexico, and Wyoming.

On June 17 Dr. Geddes visited the grass-feeding station, about 3 miles from Plano, which is now operated in connection with the dry-feeding station at Aurora. Seven thousand sheep were found here, all in rather poor condition. An inspection showed 5 with scab in the early stages.

The Bureau, under date of June 20, directed Dr. Geddes to visit several additional points in the vicinity of Chicago, and his reports are summarized in the following paragraphs:

Plano.—July 13: Received during the first week in July one flock of 2,700 sheep from Salt Lake City, Utah, 10 per cent of which had scab; were reloaded and shipped to Chicago. There were also received 5,700 head, coming from Buffalo, Wyo., which were free from disease. Also reloaded and shipped to Chicago. July 22: During last five days 2,800 sheep have been received from Billings, Mont., and 1,200 from Buffalo, Wyo. The first flock was free from disease, but a touch of the scab was found in the latter flock, although they had been dipped twice before starting from Wyoming.

Sycamore.—August 6: The feed yards and buildings are located on the Chicago Great Western Railway, one-half mile from Sycamore, and are owned by this railroad, but are rented to private firms. The

yards contain about 10 acres, and have three buildings, or sheds. Two of these are 320 feet long and 165 feet wide, and the other 175 by 75 feet wide. These are all well lighted, roomy, and in a fair sanitary condition. The first two have a capacity of 11,000 head and the other a capacity of 4,500 head. The firm which rents the two large sheds handles about 100,000 head every year, being itself the owner of the sheep. It contracts with neighboring farmers for pasturage. There are no sheep at these two sheds at this time.

The gentleman who rents the small shed handles about 50,000 sheep each year. They are purchased in Utah. He has no sheep on hand at this time.

This station has a straight dipping vat 90 feet long and 4 feet deep. Every sheep arriving at these yards is dipped before it is put out among the farmers.

There is another shed a mile east of the above yards. The owner does not expect to use it this year. When it is in use he dips at the yards mentioned above.

Kirkland.—August 7: The feeding station at this point is located one-half mile west of Kirkland, and contains 12 acres of yards, and two sheds 300 feet long and 150 feet wide, also a small dipping vat. This yard is owned by a man who last year handled 1,000,000 sheep, including dry-fed and grass sheep. He has 2,300 acres of good grass land, with a large stream of water running the entire length of the tract. He also contracts with other farmers for additional pasture. This gentleman has on hand at this time 3,000 grass sheep, owned by a Chicago firm and shipped from Kansas City. All are free from disease. At one time last winter there were here 46,000 sheep under cover, and all that remained thirty days were dipped. Two more sheds, 300 feet long and 165 feet wide, are being built. About September 1 it is intended to build a dipping vat 100 feet long and 4 feet deep. These yards and sheds are lighted by electricity.

Byron.—August 9: Found one sheep-feeding shed, 250 feet long and 100 feet wide, located one-half mile east of Byron. It is owned by the Chicago, Milwaukee and St. Paul Railway, and rented by a gentleman who is largely interested in the feeding yards at Sycamore. No sheep have been fed here for some time; in fact, feeding is practically abandoned. There is no dipping vat at this station. Everything here is in fair sanitary condition.

Savanna.—August 10: The sheep-feeding station here has been abandoned, the sheds having been removed to Kirkland. The yards here contain 16 acres and are fitted for cattle feeding. There are now no provisions for feeding sheep.

Morris.—August 12: The station at Stockdale is located $3\frac{1}{2}$ miles west of Morris on the Chicago, Rock Island and Pacific Railway, and is owned by this railroad and rented to a private citizen. There are here 10 acres of yards and 700 acres of pasture; two sheds 330 feet

long and 155 feet wide; a dipping vat 90 feet long and 5 feet deep. This station handles about 150,000 sheep per year, including both grass and dry feeders. No sheep are here at present, 3,700 having just been shipped to Chicago. These were from Hailey, Idaho. This yard is very well equipped for handling sheep; the buildings and fences are nicely whitewashed and in good sanitary condition. All sheep which are kept here from thirty to sixty days are dipped. Dry feeding will begin October 1.

Freeport.—August 13: The sheep-feeding station is located $4\frac{1}{2}$ miles south of Freeport. There are two sheds 250 feet long and 150 feet wide and a dipping vat 48 feet long and 4 feet deep. The sheds are being completely overhauled preparatory to dry feeding, which will begin October 1. There are no yards and pasturage in connection with this station. The Chicago Great Western Railway owns this station and rents it to a private citizen.

Lindenwood.—August 12: The station for feeding sheep at Lindenwood is located at the depot. There are here two sheds 250 long and 150 feet wide, also a dipping vat 48 feet long and 4 feet deep. No sheep are here now and will not be until October 1.

Rockefeller.—August 20: There is a small feeding station located at this point having one shed 200 feet long and 100 feet wide, and 1 acre of yards. Two years ago the owner fed 5,000 sheep, but fed none last year. He is now in the West buying sheep and wool.

Dr. Geddes furnishes a general report of his inspection of these various sheep-feeding stations and it is published herewith:

MEMPHIS, TENN., *September 15, 1897.*

SIR: Regarding the results of my investigation of the sheep-feeding stations in Illinois. I beg to submit the following report :

I found the sanitary condition of the sheds and yards very good, particularly at this season (June) of the year. The manure which had accumulated during the winter months in the dry-feeding sheds was eagerly sought for by the neighboring farmers. In the case of most stations visited by me the owners had cleaned and whitewashed their buildings preparatory to the beginning of the dry-feeding season—September and October.

Many of the feeding stations were not supplied with dipping vats until this season, and many of these were being built at the time of my visit. In these dipping vats is used any one of the well-known dips that shippers may choose; but I think most of them use either the lime-and-sulphur or the nicotine dip.

The sheep received at these stations came from Montana, Idaho, New Mexico, Utah, Texas, Arizona, Washington, North Dakota, South Dakota, and Wyoming by the way of the Chicago stock yards. I do not think that any of the sheep I saw at the several stations visited had been shipped around stations where inspectors were located, thereby intending to avoid inspection.

The cases of scab which I have reported from time to time to the Department were very slight and could not be detected without close and careful inspection with the aid of a hand glass. The sheep which I inspected at Streator acted very much as if they were affected with the scab—rubbing, biting, and pulling bits of wool from the flank and back; but upon closer inspection I found the wool filled

with a small spear-shaped needle grass which pricks the skin, causing some uneasiness.

I was told by a number of prominent sheep feeders and shippers that any railroad in the West would accept for shipment sheep suffering with scab, if the shipper was willing to take the chances of having his sheep stopped en route. I was also informed that a bill of health from the different Western States could easily be obtained, regardless of the condition of the sheep. One shipper from Utah had with him a clean bill of health, while about 10 per cent of his sheep were suffering from scab.

In talking with these feeders, I find that most of them seem very anxious to cooperate in any way they can with the State and Federal inspectors. But they complain that the laws relating to the control of scab in the various States are not enforced, nor are the inspectors who are appointed in counties and districts competent to perform their work.

I believe that part of Order No. 5,¹ of June 18, 1897, regarding the disinfection of cars, is very poorly complied with by the railway companies. They say they can not tell scab in its early stages. At some of the feeding stations where scab is detected a tag is placed on the car directing that it be returned from Chicago to the feeding station for the purpose of disinfection. As there are no inspectors at these feeding stations, I think little disinfection is done, and many of the cars are not returned at all.

Respectfully,

T. A. GEDDES,
Inspector.

Dr. D. E. SALMON,
Chief of Bureau of Animal Industry.

REPORT FROM DR. ROBERT H. TREACY.

Under instructions from the Bureau, dated February 24, 1897, Dr. Robert H. Treacy visited several points in Iowa where sheep were being fed, to ascertain the prevalence of scab and also its source. At Ashton he obtained the information that a firm of sheep dealers, during the years 1889 to 1893, inclusive, had shipped 40,000 sheep from Wisconsin and Michigan to points in South Dakota. Here they were distributed in small flocks among the farmers, being sold on time, and paid for in wool and wethers. These sheep remained healthy until 1893, when another dealer brought in 6,000 head from Montana, and distributed them in the same neighborhood in the same way. These latter sheep were affected with the scab, which spread through all the flocks on the summer ranges, largely through the exchange of bucks, until it now exists, so far as Dr. Treacy could learn from people who have a money interest in sheep, in several counties of South Dakota, namely, Hyde, Hand, Spink, Sully, Potter, Clark, Marshall, and Faulk. A great many of these sheep come into Iowa for feeding purposes.

Judging from their methods of handling sheep here, it is safe to say that scab will remain in both States. The sheep are dipped after shearing but once, and the feeders dip again before going into winter feeding.

¹This order appears on p. 151.

At a later date Dr. Treacy writes as follows from Battle Creek:

So far as I can learn from observation, from commission men at Sioux City, and from stock agents whom I have met, I am of opinion that only a small percentage of the sheep going to market from Iowa are raised there. The larger number come from small ranches in North Dakota, South Dakota, Wyoming, Montana, and Colorado. The reason given for this is that there are more small breeders in these States, who sell their sheep on the farm. The large breeders market their own flocks.

Dr. Treacy's further observation at this point was that sheep on the large ranches were healthier than those on small ones, as the sheep on the large ranches are dipped regularly and handled by experienced help.

At Ida Grove a flock of 3,000 sheep were inspected, 2,200 of which were "Colorados," brought in September 15, 1896; they were healthy then. Eight hundred were brought in from South Dakota October 27. This latter number was scabby. Both lots were fed in the same yard. The South Dakota sheep were dipped at Omaha once, but scab reappeared in January. Although these have been dipped twice since, scab has now appeared again. A load of these sheep was placed on the Chicago market March 1; 500 are being held for shipment to Missouri for breeding purposes; and the balance will be sent to market as soon as they are put in condition.

At Arthur Dr. Treacy inspected a flock of 750 sheep, 250 of which had come from South Dakota. These were affected with the scab soon after arriving at the farm. They were all dipped twice and are now healthy. His concluding report was as follows:

ANAMOSA, IOWA, March 22, 1897.

SIR: I have visited all points in Iowa, in accordance with instructions, and have to report that I found sheep scab in every county visited except Jones. There was in this county last winter a flock of 840 sheep affected with scab, but on this account were marketed on January 22.

I would estimate the loss from scab to the feeders of this State to be about 15 per cent of the natural profits of the business. Some were forced to put sheep on the market before they were prime, and others have held back and lost a great deal of the wool. Some flocks were nearly naked.

The farmers here are in the sheep business to stay. All are looking for sheep. They are afraid of scab, however, very few knowing anything about it.

My information leads me to believe that Montana and the western parts of North Dakota and South Dakota have healthy sheep. Montana, in fact, is supposed to have been free from sheep scab since 1893. This is what I am told, but I have no accurate information. New Mexico, Colorado, Utah, Wyoming, the southern portion of North Dakota, and the river counties of South Dakota, with the exception of the reservation, are affected with sheep scab to a great extent.

The following table shows the flocks affected by the scab which were visited by me, the locality, and the States whence imported:

Table showing the flocks of scabby sheep inspected in Iowa.

Town.	County.	Number.	Whence purchased.
Ashley	Osceola	230	South Dakota.
Arthur	Ida	2,800	Colorado and S. Dakota.
Battle Creek	do	a 12	South Dakota.
Eldora	Hardin	b 77	California.
New Providence	do	460	Colorado.
Union	do	487	Mexico.
Do	do	470	Colorado.
Do	do	732	New Mexico.
Do	do	700	Do.
Do	do	467	Do.
Do	do	388	Do.
Do	do	200	Do.
Brooklyn	Poweshiek	442	Do.
Do	do	1,170	Do.
Do	do	1,150	Do.

a This flock had at first 350 sheep, but all but 12 were shipped in February.

b This flock had originally 383 sheep, but all but 77 were shipped thirty days ago.

One feeder at Malcolm had 500 sheep free from scab. He had 1,500 head in the fall, but had shipped them, afterwards selling 1,000 healthy ones. At this point I inspected three other flocks of 737, 514, and 130 head, respectively, and found them all free from the disease. They were diseased in the fall, but had been dipped.

Respectfully,

ROBERT H. TREACY,
Inspector.

Dr. D. E. SALMON,
Chief of Bureau of Animal Industry.

REPORT FROM DR. DON C. AYER.

Dr. Don C. Ayer, inspector at South Omaha, reported the delivery at that place of scabby sheep as follows. In each instance the Bureau promptly notified the shipper and the railroad transporting the sheep that it was in violation of law, and inclosed the regulations of this Department governing such cases:

July 22: Two cars containing 436 sheep affected with scab were received from Casper, Wyo. They had been fed at Grand Island, Nebr.

March 24: A consignment of sheep from Sidney, Nebr., received, 215 of which were affected with scab.

April 17: Four hundred and thirty-three sheep from Magdalena, N. Mex., and 903 from Las Vegas, N. Mex., all affected with scab, were received.

April 27: There were delivered 238 head of scabby sheep from Raymond, Nebr.; 1,239 from Las Vegas, N. Mex.; 476 from Hooper, Nebr., and 434 from another shipper at Hooper, Nebr.

May 18: A Colorado dealer delivered 1,084 head affected with scab.

May 21: There were delivered from Socorro, N. Mex., 253 head of scabby sheep.

The information embodied in the above reports showed that proper care was not being exercised by shippers and transportation companies to prevent the interstate shipment of sheep, and consequently many flocks of sheep having scab were delivered at the feeding stations preparatory to being placed upon the markets of Chicago and the cities farther east. So far as possible the offender in each case was notified by letter of his duty under the law, and Order No. 5¹ was given the widest circulation among sheep men and transportation companies.

¹ This order appears on p. 151.

ANTHRAX IN THE LOWER MISSISSIPPI VALLEY.

During the spring and summer of 1896 there prevailed in the northern part of the State of Louisiana and in a few of the adjoining counties of Mississippi and Arkansas an exceptionally widespread and fatal epizootic of anthrax, or, as the disease is named by French-speaking peoples, charbon. In the extent of country infected, and in the number of animals attacked, this outbreak of anthrax is unprecedented in the scant history of the disease as it has appeared in the United States.

EXTENT OF INFECTED TERRITORY.

The infected territory was situated in one of the richest agricultural districts of the lower Mississippi Valley. It included Madison, Morehouse, Richland, Tensas, Concordia, East Carroll, and West Carroll parishes in Louisiana; Phillips and Chicot counties in Arkansas; and Bolivar, Issaquena, and Claiborne counties in Mississippi. Louisiana suffered by far the most severely, not only as to the extent of territory infected, but also as to the virulence of the plague. In that State several thousands of horses, mules, cattle, and hogs were attacked, and in some parishes a heavy percentage of them died. A few instances also occurred of its communication to man. In some localities a veritable panic prevailed. The loss of large numbers of farm animals, at a season when the crops were being made and harvested, seriously crippled agricultural operations, and the irreparable losses by small farmers of their entire animal power deprived many of them of the very necessities of life.

In Mississippi and Arkansas the infected territory comprised a much smaller area than in Louisiana, and the epidemic assumed in those States a much less sweeping and virulent form. In Mississippi the cases were few in number, and in Arkansas heavy losses were reported from Chicot County only.

INFORMATION, AND EFFORTS TO SUPPRESS THE DISEASE.

The press of the State devoted liberal space to news and discussions regarding the epidemic, and the opinions of leading veterinarians as to its cause, treatment, and prevention were eagerly sought for and given wide dissemination. Both Federal and State authorities were earnestly requested to suggest some means of staying the plague, and in the meantime recourse was had to every prophylactic and curative measure that veterinary science, observant experience, or mere empiricism could suggest.

HISTORY OF THE DISEASE IN MISSISSIPPI AND LOUISIANA.

It is significant that reliable evidence exists that anthrax prevailed in several localities of the lower Mississippi Valley at an early period, and has appeared locally at irregular intervals ever since. In 1836 a disease then known as "choking quinsy" prevailed in several counties of the swamp region of the State of Mississippi. The symptoms as described indicate that the disease was none other than true anthrax. In 1865 many cases were again reported from the same region, and in the spring of 1867, a season that was marked by an unusually severe drouth, an epidemic of anthrax set in, from which it is said that scarcely a mule escaped and 90 per cent of those affected died; years elapsed before the planters recovered from their losses. Since 1867 the disease has prevailed more or less in the same localities, and the years 1875, 1876, 1881, 1882, and 1889 were marked by light epidemics. In the northern part of the neighboring State of Louisiana the disease seems likewise to have prevailed for a considerable period, and in the scant literature upon the subject occasional reference is made to local outbreaks of anthrax there, or of a strikingly similar disease, for a period covering almost half a century. In the same parishes that were affected in Louisiana in 1896 an epidemic, far less fatal and more restricted in area, occurred in 1884; but since then this section is said to have been practically free from the disease.

PROBABLE ORIGIN OF THE DISEASE.

The exact origin of this epidemic is not known, but with the scientific knowledge that is now had of the cause of anthrax, and of the meteorological and other conditions that favor its development and spread, the probable origin can be surmised with considerable confidence.

Anthrax is said to have been occasionally observed in a sporadic form in the alluvial districts of southern Louisiana ever since the settlement of that country. Authentic records of its ravages, however, are somewhat scarce, and up to recent years a lack of scientific knowledge of the pathology of the disease has made intelligent investigation impossible. It is now, however, a well-known characteristic of this malady that when it is once introduced upon premises the soil, grass, plants, water, and other substances are liable to become impregnated with the germs of the disease. These germs are then very retentive of vitality and may remain pathogenic for years, so that animals which afterwards graze upon these lands or are fed upon the products of them are liable to contract the contagion. From the most remote times, in all countries where anthrax has prevailed, lands upon which it has existed have been observed to be disease-producing agents for long periods afterwards, though the cause was unknown.

Existing facts indicate that anthrax is enzootic in certain localities of Mississippi and Louisiana and that the present outbreak probably has some unknown correlation with outbreaks of the past. Indications point suggestively to the fact that certain localities of these States may be impregnated with the germs of the disease; and it is important to observe that the climate and soil of the low-lying lands of the Mississippi Valley are of that character which is known to be propitious to the long conservation of anthrax germs, and that meteorological conditions often prevail there which are extremely favorable to their dissemination from one locality to another.

The localities infected in 1896 lie in the rich and fertile alluvial bottoms of the Mississippi Valley, and border either upon the Mississippi River or its tributaries. The infected lands are invariably low, usually lying between the rivers and the adjacent uplands, and are interspersed with many swamps. These lands are almost yearly enriched in organic matter by springtime inundations. After the subsidence of the floods the favoring influence of a warm climate induces a rank and luxuriant growth of vegetation, but all extensive depressions in the soil are left covered with stagnant pools and the water stands deep in the ponds and marshes. Occasionally, as was the case in the summer of 1896, drouths of long duration follow; the ponds left by the inundations then subside; the herbage becomes withered; the pools, marshes, and smaller streams fall to a low level or dry up entirely; herbivorous animals are then compelled to seek water in the low-lying swamps and to graze either upon the rough forage of dried up and dusty pastures or upon the greener vegetation of low lands from which the water subsides only in seasons of drouth.

In all anthrax-infected countries it has been observed for centuries that a mysterious correlation existed between such conditions as the above—that is, with respect to soil, temperature, humidity, inundations, and drouths—and outbreaks of this peculiarly fatal disease. This correlation was long erroneously regarded as being that of cause and effect, but in recent years the science of bacteriology has demonstrated that these natural conditions simply furnish favorable media for the preservation of the germs and for the development of the disease and are in no way its direct cause.

THE CAUSE OF ANTHRAX.

Nothing is more certain in medical or veterinary science than that the cause of anthrax, and the only cause, is the invasion of the blood of animals by a minute parasitical plant, the *Bacillus anthracis*, or by its more minute seeds, called spores, both invisible except under a powerful microscope. Where and how these vegetable organisms originated can probably never be known, for the disease which they or their seeds alone can cause has existed in many widely separated countries from remote antiquity. It is only certain that their exist-

ence in nature was first discovered in the animal system by Davaine, who in 1850 demonstrated their presence in the blood of animals affected with anthrax, though he had no suspicion then that the plant caused the disease. The history of this microorganism therefore dates from its discovery in the animal system. Its presence elsewhere in nature—in water, upon vegetation, or in soil—whether in the form of plant or seed, is always regarded as being traceable to some former connection with animal life.

The vitality of the *Bacillus anthracis* depends upon two conditions, a temperature of not less than 70° F. and the presence of oxygen. In its natural habitat—the blood of warm-blooded, living animals—these two requisites to its life are furnished by natural heat and respiration. Under these conditions these parasitical plants pullulate or reproduce themselves in the blood with inconceivable rapidity—not by seeds or spores, the usual method of reproduction in plant life, but by a process of fission or indefinite segmentation—and thus produce changes in the blood which usually result in sudden death, often without visible premonitory symptoms. After death has occurred the lowering of the temperature of the animal deprives the bacilli of the heat necessary to their existence; oxygen also fails them in the carcass, and they soon disappear from the blood. Moreover, the bacteria of putrefaction, which multiply with unusual rapidity in the carcass of an animal dead of anthrax, have a peculiarly destructive effect upon the bacteria of anthrax and increase the rapidity of the disappearance of the latter.

TWO FORMS OF ANTHRAX.

Two forms of anthrax occur according as the germ of the disease gains access to the blood through the abrasion of an internal membrane or of an external surface of the body. If by an internal abrasion, there results acute, apoplectic, or internal anthrax, which usually runs its course rapidly, often without visible external symptoms, until the animal is in the throes of death; if by an external abrasion, cutaneous, carbuncular, or external anthrax results, which usually manifests itself first by swellings in the vicinity of the abraded and infected spot, runs its course less rapidly, is more amenable to treatment in its early stages, and is somewhat less fatal than the internal form of the disease. In all other anthrax-infected countries internal anthrax has been observed to be by far most common, and their literature is devoted chiefly to this form. In Louisiana this order seems to have been reversed; the recent outbreak was due largely to external inoculation, and carbuncular or external anthrax was at least equally as common as the more fatal form.

SOURCES OF THE CONTAGION.

Since anthrax is but rarely communicated directly from one animal to another during life, the complete disappearance of the bacilli (the

sole cause of the disease) soon after death would seem to indicate that a particular source of contagion was forever removed with the death of each affected animal. But, on the contrary, another phase in the life of these parasitical plants makes the dead animal often a far greater source of danger than the living one; and this phase also accounts for the existence of the spores of the bacilli outside of the animal organism—that is, on soil, water, plants, etc.—where in infected localities they are a perpetual menace to animal life.

When blood containing these parasitical plants escapes from the animal, either before or soon after death, and is then removed from conditions of temperature and atmosphere favorable to their growth, the plants are exposed to the air and rapidly “go to seed;” the seeds or spores forming within the rod-shaped microscopical bodies of the bacilli much after the likeness of seeds in the pods of common leguminous plants. These spores, unlike the bacilli, are very retentive of vitality, very resistant to heat and cold, and will germinate or develop into bacilli again when taken into the animal organism, even after they have lain in the soil or upon other substances for years. By some authorities it is maintained that they will even go through their evolution in some kinds of soil, especially in soils rich in organic matter, but this is a subject of doubt. This sporogenous property of the *Bacillus anthracis* is the one to which is accredited the principal agency in the perpetuation of the disease; and, unfortunately, the conditions in nature favorable to spore formation are by no means rare. In the first place, it is a common symptom of anthrax that discharges of blood escape from the natural openings of infected animals, especially during the convulsions which usually attend their death. Pastures may become thus infected with the spores and remain for years a source of danger to other herbivorous animals. Again, the carcasses of animals dead of anthrax are frequently opened for post-mortem examination, or for the purpose of making salvage of the hide or flesh, before the bacilli in the blood have lost their sporogenous property through putrefaction or a lowering of the temperature. It can readily be conceived how these common operations favor the perpetuation and spread of the contagion. Animals recently dead are often carelessly dragged across fields to out-of-the-way places, where their carcasses are left uncovered, and the contagion thus spread in obvious ways by carnivorous animals or rapacious birds; or they are thrown into streams or swamps, where the spores may again be taken into the systems of animals which come to drink, and whence the germs may even be carried by inundations and deposited on the vegetation of other lands.

The careless burial of animals is another fruitful source of infection. Earthworms may bring the spores to the surface from shallow graves, or the natural process of evaporation, especially in seasons of drouth on alluvial soil, may draw them up with the moisture. In

fact, so numerous are the opportunities presented for the formation of these pathogenic spores and for their dissemination over substances with which animals may take them into their systems, that anthrax would be the most devastating scourge known to the animal kingdom but for the limitations which nature has placed upon the invasion of the *Bacillus anthracis* and its spores into the animal blood.

The reports received by this Department from the infected parishes of Louisiana, almost without exception, attributed the extensive spread of anthrax there in 1896 largely to external inoculation by flies; and many inquiries were made with the sole object of ascertaining some substance that would be efficacious, when applied to animals, in keeping flies off their bodies. The swarms of these insects indeed constituted a veritable plague. There were many varieties, chiefly the blood-sucking sort; but to the *Tabanus lineola*, a small gray horsefly, was attributed the principal agency in disseminating the germs of the disease. It is notable that in foreign countries, although it is recognized that the fly may carry the germ of anthrax upon its feet or body from a diseased to a healthy animal, or may infect a healthy beast with its proboscis after having drawn blood from the infected one, yet few opportunities have ever occurred for extensively observing this method of infection. But in the lower Mississippi Valley inoculation by flies has long been regarded as an especial source of danger. In an outbreak in the State of Mississippi in 1889 it is recorded that swarms of a particular species of horsefly infested the infected districts, and attacked animals in such numbers as to leave upon the back, belly, and legs thick masses of clotted blood. This particular species was popularly believed to be the direct cause of the disease, instead of a mere medium of infection, and, therefore, became known as the "charbon fly." That flies also played an important part in the extensive dissemination of the disease in the recent epizootic in Louisiana, there seems to be no room for doubt; and it will be readily recognized how exceptionally an important factor this method of dissemination may be in the spread of this disease. It has been observed in all anthrax infected countries that the disease is usually confined to limited localities, sometimes to a single field where the germs have found lodgment and remain localized. The removal of animals from such localities is often marked by a cessation of attacks of the infection; or animals may even remain in the locality for a long time and only a few of them, possibly only one or two, may take the germs into their systems and contract anthrax. But where flies become common, active agents in the dissemination of the germs in an infected area, particularly flies in such swarms as appear in the lower Mississippi Valley in warm dry seasons, the disease is not likely to be limited to any defined locality, but to be spread over a territory limited only by the range of the flies.

Another factor, which was equal if not greater than the above in causing the epidemic of 1896 in Louisiana, was the careless disposal made of the carcasses of dead animals. Especially was this true early in the epidemic before scientific knowledge of the cause of the disease and of the prophylactic measures necessary to combat it had been generally disseminated among the people. In many instances it is known that animals were left lying in the woods or fields on the spot where death had overtaken them. In others they were dragged or hauled to the swamps and left exposed to the elements or thrown into the ponds, streams, and marshes. Even when burial was resorted to it was often made at shallow depth, and little attention was paid to the disinfection of the soil or of substances that might have become impregnated with germs or spores from the dead animal. Ignorance of the vital necessity of preventing spore formation resulted in a common lack of effort to prevent all unnecessary escape of blood in handling fresh carcasses, or to destroy by disinfection the spores already formed in blood which had escaped from the bodies of living animals during the course of the disease. Few precautions were taken to keep living animals away from infected localities, or to keep carnivorous animals away from the carcasses of the dead. Hogs and dogs were allowed access to fresh carcasses, thus contracting the disease themselves and spreading the germs over wider areas. Buzzards were also believed to have added to the extensive spread of the contagion by feasting upon infected carcasses and carrying the germs elsewhere upon their feet and bodies. Even the products of soil which had become infected by this careless disposal of carcasses were doubtless in some instances a source of infection. A well-authenticated instance occurred where a number of mules which had previously shown no symptoms of ill health were fed upon a newly purchased lot of rice bran. A few days later anthrax attacked several of them. The bran was suspiciously regarded as being the vehicle in which the spores had been transported and its use was temporarily discontinued. For the ensuing fortnight no more deaths occurred. It happened that by accident the bran was then again used for feeding purposes and three more animals died showing symptoms of anthrax. The use of the bran was then permanently discontinued, the infected premises carefully disinfected, and the disease has not since appeared upon the plantation. A competent veterinarian, who had carefully studied this particular outbreak, gave the opinion that the rice bran was doubtless the source of the infection and was probably a product of rice which had been raised on infected soil. Without detailing specific cases, it is evident that the careless handling and disposal of infected carcasses, particularly where anthrax is raging in epizootic form, must necessarily result in a wide distribution of the pathogenic germs, whence they may gain access to the animal system in ways so innumerable that intelligent imagination rather than actual observation

can alone be relied upon in many instances to account for the origin of outbreaks of this disease.

STATISTICS ON THE PARISHES INFECTED.

It has not been found possible to obtain complete statistical returns of the number of animals attacked and the losses incurred from all the parishes of the infected territory. Approximate estimates, however, have been received from five contiguous parishes of northeastern Louisiana, which are valuable as showing the virulence of the plague, the species of animals which were most susceptible, the kinds to which it proved most largely fatal, and the pecuniary losses that it inflicted upon the communities.

The following is the statistical history of the epizootic in the above-mentioned territory, by parishes:

Table showing number of animals affected with anthrax, number dead from the disease, and value of animals dead from the disease.

Animal.	Number of animals in parish.	Number affected with anthrax.	Number died of anthrax.	Total value of animals lost from anthrax.
Richland Parish:				
Horses.....	400	300	150	\$11,250
Mules.....	1,720	880	420	33,600
Cattle.....	2,000	500	450	4,500
Sheep ^a				
Hogs.....	3,000	1,500	1,200	3,000
Madison Parish:				
Horses.....	2,520	10	6	250
Mules.....	3,535	500	300	20,000
Cattle.....	4,882	500	350	3,500
Sheep.....	350	None.	None.	
Hogs.....	2,335	1,000	1,000	2,000
Morehouse Parish:				
Horses.....	5,000	140	50	1,500
Mules.....	4,500	100	45	2,300
Cattle.....	13,500	100	30	300
Sheep.....	4,000			
Hogs.....	40,000			
Franklin Parish:				
Horses.....	1,650	175	85	2,550
Mules.....	600	200	96	3,840
Cattle.....	10,935	100	100	800
Sheep.....				
Hogs.....				
East Carroll Parish:				
Horses.....	2,000	100	35	1,750
Mules.....	570	570	245	1,715
Cattle ^b				
Sheep ^b				
Hogs ^b				

^a No statistics.

^b No noteworthy mortality.

COMMENTS ON THE STATISTICAL EXHIBITS.

A study of the above statistics, with reference to the statistical history of anthrax as it has appeared in other countries, will reveal some peculiar and unusual features in the Louisiana epidemic. Sheep, which have generally been given a first rank among the species of animals susceptible to this disease, seem, according to the received returns, to show almost an entire lack of receptivity. It would be interesting to know whether flies played even a more important part in the spread of this epidemic than has been attributed to them, and the natural covering of wool of this species of animal protected them from the attacks of these pests. On the other hand, swine have commonly been regarded as possessing a somewhat limited degree of refractoriness to this plague; yet in the returns above given from Richland and Madison parishes this animal shows a remarkable degree of receptivity, and of those attacked almost all succumbed to the disease. The easy access which these carnivorous animals had to infected carcasses, through the commonly careless disposition made of the latter, naturally suggests itself as the probable cause of this unusual feature of this epidemic. It is also notable that horses and mules showed a greater susceptibility than cattle, though the latter have commonly been regarded elsewhere as yielding more readily to the infection.

REMEDIES, UNSCIENTIFIC AND SCIENTIFIC.

In the early part of the Louisiana epidemic, when ignorance of the pathology of the disease was all but universal among the people, the subject of curative treatment naturally attracted great attention, and the remedies suggested were as varied and innumerable as they were unscientific and ineffectual. As is usual in the early part of anthrax epidemics, before the virus of the contagion has undergone the attenuation which it has often been observed to undergo as the epidemic runs its course, all medicinal agents seemed powerless. Death usually occurred before the need of treatment was discovered. But later on in the epidemic, when the carbuncular form became more common and the swellings presented a definite point for treatment, multitudinous opportunities occurred for popularly recommended unscientific remedies. A few of them were extraordinarily severe and cruel. The swellings were pierced with pointed red-hot irons; concentrated lye was applied to them; they were burned with red-hot shovels; the swollen parts were saturated with turpentine and set fire to; and official record has been made of animals which had one continuous suppurating sore extending from the lower lip to the flank. It has been averred by veterinarians that "many valuable animals died, not from charbon, but from the agonizing and excruciating pain produced by powerful escharotics." As the epidemic progressed, however, and

knowledge of the cause of anthrax became disseminated among the people through the medium of the press and veterinary science, these practices generally gave way to more enlightened methods of treatment. It is well known that where the germs of anthrax have actually entered the circulatory system, especially in considerable numbers, curative treatment is of little or no avail. But the unusual prevalence of the carbuncular form of the malady during this epidemic gave scientific curative treatment a prominence that it would not otherwise have possessed. When the swellings could be discovered in their very incipency, and the germs had not yet gained the circulatory system, the injection of germicidal solutions into the enlargement seems in some cases to have been followed by good results by destroying the germs in their localized area. Many different solutions were prescribed. A preparation prescribed by the State authorities was a 5 per cent aqueous solution of carbolic acid; to each ounce of this was sometimes added 2 grains of corrosive sublimate. The injection was made with an ordinary hypodermic syringe. Blistering of the swellings was also recommended, by means of liniments ordinarily composed of agents such as hartshorn, turpentine, camphor, iodine, chloroform, etc., mixed with oil, and the most dependent part of the enlargement was sometimes carefully scarified. The internal treatment prescribed, to be used in connection with the external, was the common purgatives usually recommended in cases of anthrax. Of these curative measures it seems only possible to state that individual experiences occasionally attributed remarkable efficacy to them, but the general history of their use in this epidemic is not calculated to inspire belief in general benefit from their use. Veterinarians reiterated again and again during the course of this epidemic that the only successful treatment of anthrax is not curative, but preventive; and persistent insistence upon the necessity of prophylactic measures gradually converted the public mind to a belief in them as the only source of relief.

The preventive measures recommended were on two lines:

- (1) The treatment of healthy living animals by a process of vaccination which, it was claimed, would render them immune to the disease and the application to their bodies of a preparation to protect them from flies.

- (2) The application of such sanitary measures throughout the infected districts as would tend to destroy or neutralize, so far as possible, every condition favorable to the further increase and wider distribution of the microscopical plant life which is known to be the cause of this disease.

The vaccine used in the Louisiana epidemic was the Pasteur anthrax vaccine, and it is said that 20,000 head of stock, mostly mules, were vaccinated. This substance is produced by the artificial cultivation of the virus of anthrax in certain media where by continued exposure

to the air and a high temperature it can be attenuated to an innocuous degree; the animal vaccinated with it suffers from a mild fever, but is then said to become immune to anthrax, at least for a period of some months. No statistical statements have been received by this Department from which can be formulated the general results of the use of this preventive. The application most generally used to protect animals from the attacks of flies was the following formula, namely, common hard soap, one-half pound; fish oil, 2 gallons; water, 1 gallon. Dissolve the soap in boiling water and while still hot add the fish oil and agitate the whole until thoroughly mixed. For use, add to 1 part of the emulsion 8 to 15 parts of cold water, and apply all over the animals. A large or small quantity can be made as desired.

The sanitary measures usually recommended will be found in the following report of Dr. Asa N. McQueen, upon the result of his investigations into an outbreak of anthrax in Richland Parish, La. :

REPORT ON ANTHRAX IN LOUISIANA IN 1896.

NEW ORLEANS, LA., *June 15, 1896.*

SIR: In accordance with your order of the 4th instant, I started on Monday, June 8, to investigate an outbreak of anthrax at Rayville, La., and its vicinity, and arrived there the following afternoon. I readily recognized the disease to be anthrax, and gave the authorities advice for its suppression. Below is my report on the investigation, with a copy of the rules that I gave to the authorities.

Richland Parish, La., is very low and swampy, and is drained by the Boeuf River, which frequently overflows its banks. The upland is a sandy loam and lies in narrow strips from one-fourth mile to 1 mile in width between extensive tracts of wooded swamp land. These woody swamps are nearly always covered with water, and on many farms furnish the only source of water supply for animals turned out to pasture.

The outbreak of anthrax in this parish was, as is nearly always the case in outbreaks of this disease, preceded by a long drouth, during which the water in the swamps and smaller streams ran very low. There can be no doubt, moreover, that this outbreak was made more extensive by the careless disposal of carcasses of animals dead of the disease, the common custom being simply to drag them from the spot where death had occurred across fields, pastures, or highways to the swamps, and there leave them to decompose or be devoured by the dogs and hogs, which here always run at large. Even when burning was resorted to as a mode of destroying the carcasses, the work was only half done. In one place I saw a burned carcass of which at least two-thirds was unconsumed: in fact, it was so little burned that the hair still remained on the under surface of the body, upon which two dogs and three hogs were feeding. I was informed that such was the way that the burning was usually done. I heard of no instances of the burial of carcasses.

The first outbreak that I investigated was on the farm of J. B. Summerlin, situated 5 miles southeast of Rayville, in the midst of a large swamp. On this place there were about 50 head of cattle, of which 2 cows and 1 heifer showed the following symptoms: Swellings about the region of the larynx, point of breast, and undersurface of the abdomen. The respirations were somewhat increased, but I attributed this to the animals having been driven from the pasture a few minutes before. The cattle showed no other signs of sickness, and were feeding well. The swellings had been treated with a blistering mixture containing oil of turpentine, aqua ammonia, vinegar, and coal oil, applied twice daily.

On the morning of June 10, my attention was called to a grade Jersey cow in the yard in the rear of the hotel where I was stopping. The animal had, with other cattle, been turned into the yard the night previous in an apparently healthy condition. At 6 a. m. I found the respiration 30 per minute, pulse 100 beats per minute, temperature 103.7° F., attended with rigors and staggering gait; the conjunctivæ were red and injected; rumination suspended. At 10 a. m. she was dead and the carcass was destroyed by burning. I intended to hold a post-mortem, but as there was another animal which had just died, showing the same symptoms, it was more convenient to hold the autopsy on the latter. It showed the following appearances: The carcass was bloated; a small tumor was apparent under the skin of the neck near the larynx, and there were sero-albuminous infiltrations of a yellow color under the skin of the left flank and inguinal region. The abdominal cavity contained a red serous exudation. The lymphatic glands of the abdomen were enlarged and full of dark blood extravasations. The intestines throughout were covered with petechial spots. The liver was also covered with and full of petechial spots throughout. The kidneys were enlarged, hyperæmic, and of a soft consistency. The stomach, bladder, and urine were normal in appearance. The spleen was enlarged to about double the normal size, the capsule dark blue, the substance disintegrated, nearly black in color, and when cut into would nearly run. The lungs were hyperæmic; the trachea and large bronchial tubes contained a dark-colored froth; and the mucous membranes showed petechial spots. The epiglottis was swollen and of a dark-red color. I have no hesitancy in saying that the animal had died from anthrax.

After completing my examination of the above case I went, in company with Dr. Evans, a physician of the neighborhood, to the plantation of Mrs. F. E. Jordon, 5 miles north of Rayville, on the Boeuf River. There I found 3 mules sick, all showing well-marked symptoms of anthrax. On this place there were 25 mules and 28 horses, all kept in the same pastures and under the same conditions as regards food and water. None of the horses have been taken sick, while 14 mules have died and 3 others are now sick. I obtained from Mrs. Jordon the following history of different outbreaks of anthrax on her place: In 1874, after an overflow, 11 mules died on this place. The cause of death was then supposed to be colic, but, judging from the manner and rapidity with which the animals have died this season, Mrs. Jordon now believes the cause of the former deaths to have been anthrax. In 1884, 11 cases occurred on the same farm with only 2 deaths. In 1891, 7 more cases occurred, all showing external swellings. They were treated by deep scarifications and by applying a blistering mixture, and all affected animals recovered. I also visited several smaller places in and about Rayville, but did not find many animals sick, because a great many owners had already lost all their stock.

Of the various remedies used, an injection of the tincture of iodine under the skin and into the tumors seemed to produce the best results, but as many cases get well without treatment, or with very mild treatment, it is hard to recommend any particular plan of treatment.

After completing such investigations as I thought necessary in the immediate vicinity of Rayville, I was advised to go to Delhi, La., a few miles east of Rayville, where I was informed the present outbreak of anthrax in Louisiana had first made its appearance. On my arrival I found that, so far as could be ascertained, the disease had broken out there simultaneously on a number of plantations miles apart, and, as there were no cases in the immediate vicinity, I returned at once to New Orleans.

The following is a copy of the rules given the authorities of Richland Parish for the suppression of anthrax:

(1) All owners should promptly declare the existence or suspected existence of the disease.

(2) Isolate diseased animals so as not to allow them to come in contact with healthy animals.

(3) Prevent all animals from drinking stagnant water.

(4) Thoroughly burn all dead animals, also all the litter and alimentary matter with which infected animals have been in contact.

(5) Disinfect all places that have been occupied by diseased animals.

(6) Do not allow dogs, hogs, or poultry access to dead animals, as they may contract the disease by eating the flesh or blood.

(7) Feed only good, sound feed, and avoid turning animals out upon infected pastures.

(8) The disease is contagious, and carcasses should not be handled by persons with sore or scratched hands.

Respectfully submitted.

ASA N. MCQUEEN,
Veterinary Inspector.

Dr. D. E. SALMON,
Chief of Bureau of Animal Industry.

ENZOOTIC CEREBRO-SPINAL MENINGITIS IN HORSES, AND HOG CHOLERA IN IDAHO.

By W. L. WILLIAMS,

Special Agent, Bureau of Animal Industry.

In obedience to instructions of March 12, 1896, I went to Idaho Falls, Idaho, on March 17, to investigate reported diseases of horses and swine. Prior to this I had received communications, under dates of February 26 and March 2, from Mr. W. F. Cash, at Idaho Falls, Idaho, describing, as well as one not versed in pathology could do, the symptoms and post-mortem appearances of a disease affecting horses, and of one affecting hogs, all supposed to be manifestations of one and the same disease with a common cause. From these descriptions it was impossible to arrive at any definite conclusions as to the nature of the malady or maladies.

Reaching Idaho Falls on the morning of March 18, I reported to Superintendent W. F. Cash, who rendered me every possible assistance, and accompanied me to the various points where affected animals were reported.

Idaho Falls is located in the Snake River Valley, at an altitude of 4,200 feet. The soil of the valley, varying in depth from a few inches to several feet, is alluvial and practically free from vegetable mold. The subsoil is of gravel and cobblestone, 20 to 30 feet in depth, resting upon lava rock. The rainfall is very meager; but two or three rainy spells usually occur during the year and these continue for only three or four days each. Crops are grown by irrigation only. They consist chiefly of the smaller cereals, potatoes, alfalfa, and timothy, which, with scant native grasses, furnish the food supply for animals. The water for animals is procured, either directly or by irrigating ditches, from the Snake River or its tributaries. The latter are all mountain streams, and furnish an apparently perfect water supply.

Referring to the letter addressed to the Chief of the Bureau under date of March 3, 1896, by Prof. Charles P. Fox, of the University of Idaho, which formed the basis of orders to me, it is evident that a common belief prevailed in the affected section that the disease of horses was identical with that of swine.

OBSERVATIONS UPON THE DISEASE OF HORSES.

My investigations of the disease in horses resulted as follows: The malady has been known in the Snake River Valley, in the vicinity of Idaho Falls, for about three years; it prevails chiefly, but not wholly,

on the east side of the river near the foothills, along a small tributary of the Snake River called Willow Creek. Nothing in the location suggests a possible cause for the notable prevalence of the disease in this particular section of the valley; except, perhaps, that since the water in this creek here flows nearer the level of the valley, and is, therefore, more easily available for irrigation purposes, and since the soil is here deep and rather fertile, this portion of the valley was earlier and more thickly settled.

So far as could be learned the disease has not prevailed on the foothill range, near which the creek before mentioned flows, nor have we learned of any similar affection among range horses in the northern Rocky Mountain region.

SYMPTOMS.

An opportunity did not occur to observe any cases of the disease in its earlier stages, but the symptoms of those stages were fully described by several losers; their descriptions agree in all important particulars.

The premonitory symptoms, when noticeable, consisted mainly of nervous depression and paralysis. First the animal showed dullness and lassitude, performing its work with apparent difficulty, and sweating easily. The appetite was good, but eating was slow; thirst was normal; the urine was apparently unchanged; the bowels were torpid; the feces not very hard, and at times coated with mucus. As the disease progressed the movements of the animal became uncertain, with a marked tendency to stumble; the partial paralysis usually affected the fore legs and hind legs alike; the penis became more or less pendent, hanging out of the sheath; the power of mastication and deglutition was found to be quite deficient in some cases, in others almost wholly lost, although the appetite generally remained normal at this stage.

After an interval, varying from a few hours to several days, these symptoms all become aggravated, especially the loss of locomotive power; the animal falls, unable to rise, but if assisted to its feet it will, as a rule, move about with comparative freedom for variable lengths of time, feed naturally, and appear much improved, until, through a natural desire to lie down or through accidental stumbling, it again falls, and is unable to regain its feet without assistance.

Animals in the early stage of the disease, or those suffering from a mild attack, lie naturally upon the chest, but the majority of those more seriously affected lie flat upon the side, head markedly opisthotonic. Some affected animals lie very quietly and rarely move either the head or feet except when disturbed, but others are in almost constant motion, and form semicircular excavations in the bedding or earth by constant motion of the feet. When an animal is down there is frequently a complete loss of appetite, although in

some cases it remains fairly good. The recumbent position increases the torpidity of the intestines, and may cause abnormally dry feces and difficulty in voiding the urine. The oro-pharyngeal paralysis causes decomposition of contained mucus and food, resulting in a marked fetor.

No reliable data were obtainable as to the temperature, pulse, respiration, or the appearance of the visible mucous membranes of affected animals except in the three cases examined by me and described below. The course of the malady varies. In most cases the premonitory dullness and lassitude continue from one to three days, but in some cases these symptoms are either absent or pass unobserved, the first symptoms noted being the inability of the animal to rise or stand. In a very small minority of cases only the premonitory symptoms occur, and after several weeks terminate in a generally incomplete recovery, but rarely in complete restoration to health. The mortality is great and amounts to over 95 per cent of the number clearly affected.

Age, sex, and condition apparently exert no influence on the disease, although many assert that fat horses or those in good condition chiefly contract the malady.

Nearly all the animals reported to have died had been kept in stables or paddocks in which considerable quantities of excrement had accumulated. The stables were mostly low, with straw roofs and straw or board sides. They were seldom tight enough to be called close. Quite a number of animals, however, died which had not been stabled, but had been kept chiefly in cultivated fields and only occasionally placed in paddocks.

The food, as above indicated, consisted at times of the small cereals, but generally, and in winter especially, during which season the disease has been most severe, alfalfa and timothy hay, straw, and such native grasses as might be found were fed. The climate and altitude forbid the suggestion of moldy forage.

CASE I.

Mr. E. H. Brown, Prospect, Idaho, had on his farm on January 1, this year, 7 horses, well fed on lucern and timothy hay and little worked; 5 of them were stabled in a fair stable, the other 2 kept loose in an adjoining paddock. About January 1 one horse sickened and after a few days died. About January 20 two other deaths occurred. A fourth animal was attacked at the same time and required assistance to regain her feet, but apparently recovered, remaining weak, however, easily fatigued, and uncertain in gait. It finally grew worse and went down again on March 11 or 12, and continued to grow worse until March 18, when death ensued.

A fifth animal, a small gelding coming 3 years old, in medium condition, became affected March 12, while being driven on the road.

The symptoms were apparent weakness and much stumbling. On the morning of the 13th he succeeded with difficulty in getting up, but in the evening it was found necessary to assist him to his feet. From that date on to our examination, March 19, he was assisted to his feet daily by means of improvised slings, his appetite remaining good, with normal mastication and deglutition.

In the later stages the animal lay flat on the right side, very quiet, with no signs of movement of either head or feet; the respirations were 30 to the minute and somewhat labored; the pulse was 48, full and fairly strong; the temperature was 100° F.; the conjunctivæ were of a dirty leaden hue. This animal was killed by bleeding from the carotid arteries.

At the autopsy the cadaver was opened by removing the left fore and hind legs entire and the left abdominal and thoracic walls. The tissues were generally of normal appearance, and the peritoneal cavity contained about 1 pint of pale-yellow, rather cloudy serum. The spleen weighed about 2½ pounds and was grayish red in color; the capsule was tough and thick; the pulp dark red and firm. The stomach was partly filled with soft, moist, and partly digested food. The small intestines were healthy throughout and contained a small amount of watery ingesta. The large intestines were filled with moist, well-digested alimentary matter. The pancreas was a pale grayish yellow and normal. The liver weighed about 12 pounds, was dark red in color and firm in consistency. The kidneys weighed about 1 pound each, were of a dark mahogany color, and in section the line of demarcation between the cortical and medullary portions was not marked. The urinary bladder contained 1 quart of pale yellow, flaky urine. The left lung was somewhat congested, but otherwise healthy. The right lung was highly engorged, owing to the animal having lain for some time flat upon the right side. The pericardium contained 8 ounces of pale orange-colored serum; the left auricle and ventricle were filled by a continuous firm red clot, and the right side of the heart was partly filled with dark blood. The spinal cord in the lumbar region appeared normal, and a small quantity of fluid escaped when the meninges were cut into. On cutting through the spinal cord at the occipito-atloid articulation a large amount of clear serum, apparently 8 to 10 fluid ounces, escaped. The cerebral vessels were all much distended with blood, and the plexi at the base of the cerebellum were very markedly distended.

CASE II.

A. E. Stanger, Ionia, Idaho, had, in July, 1895, 9 horses belonging to himself and 5 belonging to other persons. Since the above date 13 of these have died at different times, showing the general symptoms described above. On March 18, the fourteenth, a 5-year-old black grade draft gelding, fat and weighing about 1,200 pounds, was down

with the disease. Up to this date, when he was found down and unable to arise, the horse had appeared well.

On March 19 the animal was still flat on the right side and more uneasy; the temperature was 100.6° F., the pulse 84, the respiration 36. It was killed by severing the carotids, and an autopsy made immediately. The cadaver was opened by removing the left fore and hind legs and the left chest and abdominal walls. The left lung was normal except two slight discolorations on the anterior lobe and a slight congestive patch along the inner side of the upper border. The lower two-thirds of the right lung was greatly congested, dark colored, and impervious to air. (This change was evidently the result of the decubitus, which had been constant on the right side for two days.) The heart was empty and normal. The spleen was a light bluish gray; the capsule tough; the parenchyma firm and normal in size. The intestines were healthy and moderately filled with partly digested food. The pancreas was healthy; the stomach was well filled with partly digested food, and the walls were healthy. The liver and kidneys were normal; the bladder healthy and empty. The spinal cord in the lumbar region was apparently normal, and a small quantity of serum escaped upon division. Upon cutting through the spinal cord at the occipito-atloid articulation the cerebro-spinal fluid escaped in a considerable amount, flowing a stream for several minutes as large as a small lead pencil. The cerebral meninges were highly congested, as were all the cerebral vessels.

CASE III.

Of 15 horses, Mr. J. H. Payne, Idaho Falls, Idaho, lost one mare about March 1, and a second animal afterwards was attacked.

The animal, a bay mare advanced in pregnancy, weighing about 1,200 pounds, was noticed weak and dull on March 19, and went down on March 20. On March 21 I found the mare recumbent on the right side, restless, with a respiration of 27, pulse 50, and temperature 99.8° F.

The animal was killed by stabbing in the heart, and an autopsy made immediately. The body was opened on the left side, and the muscular tissues were found healthy and thickly embedded in fat. The left lung was healthy, but the right lung was moderately congested (decubital). The heart was healthy. The uterus was found healthy, and contained a ten-and-a-half months' well-developed fetus. The spleen, intestines, kidneys, and liver were healthy, the bladder empty. The spinal cord in the lumbar region was surrounded by a small quantity of pale, clear serum, and on cutting through the cord at the occipito-atloid articulation a large quantity of serum escaped in a stream. There was moderate congestion of the brain, the vessels on its surface being filled with blood, especially marked in the plexi about the base of the cerebellum.

NAME OF THE DISEASE.

The diagnosis of these three cases showed the animals to be affected with enzoötic cerebro-spinal meningitis.

The etiology is unknown. As related above, however, attendant circumstances indicate that some of the causes frequently assigned for enzoötic cerebro-spinal meningitis, especially the defective drainage of stables and paddocks, could not operate in these cases, nor could moldy food have been the cause, since fungi cannot here grow in any great amount upon vegetation, owing to the extreme dryness of the climate. The annual numerical loss in the infected region could not be readily determined, but it reaches probably over 100 horses. This is a large percentage in this small and thinly settled area. Since the majority of horses kept in the valley are animals used for work purposes, and since on many farms all the horses have died, the disease constitutes a formidable barrier to successful agriculture.

OBSERVATIONS UPON THE DISEASE OF HOGS.

My observations regarding the disease of swine are as follows: During the past few months considerable numbers of swine have died in and about Idaho Falls. Among the heaviest losers were Mr. C. C. Tautphaus and the Cooperative Wagon and Machinery Company, both of Idaho Falls. The former is a packer, who bought swine in small lots from various farmers and confined them together in the slaughter-house pens, where they ate the offal from slaughtered animals. The latter are general merchants, millers, and stock shippers, who bought swine promiscuously and fed them in a common lot upon mill refuse, shipping those which were fat at such times as were convenient. The disease also existed in various sections of the Snake River Valley, many farmers suffering heavy losses. The affected animals which we were able to find were chiefly chronic or subacute cases, so that for general symptoms we were compelled to rely upon such information as the owners or caretakers of affected swine were able to give us.

SYMPTOMS.

The general symptoms were dullness and great lassitude. In some cases in the earliest stages the animals would lie in cold water in the creek. Affected animals usually maintained a recumbent position, usually on the chest, but frequently flat on the side. The gait was tottering and uncertain, respiration accelerated and difficult, attended with wheezing, frequent cough, and rarely spasmodic expiratory efforts—thumps. The bowels were constipated and diarrhea occasionally ensued; the appetite diminished or was lost; the body was gaunt; the urine was scanty and highly colored. The disease usually assumed an acute form, terminating fatally, in from two to seven days; a few cases recovered after several weeks illness.

The disease broke out in the herd of Mr. C. C. Tautphaus, Idaho Falls, consisting of some 300 head, about January 5, 1896, and about 60 head, mostly pigs, died. On March 18, 11 head were still on hand, the others having been slaughtered and packed. Of this remnant of 11, one was sick. The patient, a sow about 8 months old, weighed about 60 pounds, and had apparently been ill for some days. The body was emaciated, and the animal showed a disposition to lie quietly. On being forced to move she did so with a weak, uncertain, staggering gait, and lay down again as soon as permitted. There was marked dyspnoea and frequent cough.

She was killed by bleeding and an autopsy was made immediately. The lower and anterior portion of the anterior lobe of the left lung was œdematous, the flesh colored and impervious to air; the intra-lobular connective tissue was thickened and white, the lobuli dark red and dotted with pale reddish yellow spots about one-thirty-second inch in diameter. Scattered over the œdematous portions of the lung beneath the pleura were small collections of gas about one-eighth to three-sixteenth inch across, while scattered over the surface of the lung were a few small ecchymoses of a bright-red color one-thirty-second inch in diameter, the remaining portions being otherwise healthy. The right lung was œdematous in the middle portion of the anterior lobe and in the lower three-fourths of the middle lobe. On section, these œdematous portions of the lungs were found semitransparent and the contained fluid oozed freely from the cut surface, while by a slight pressure of the thumb and finger the effusion was readily pressed out, the lung collapsing. The bronchii of the affected portions were filled with a thick, tenacious, transparent mucus, containing numerous pus cells. The stomach, intestines, liver, spleen, kidneys, bladder, brain, and spinal cord offered no microscopical pathological changes. The Cooperative Wagon and Machine Company had lost from the disease about 120 swine of different ages; and, after having shipped the healthy ones fit for market, had remaining on the premises about 30 head, mostly young and nearly all showing disease in a chronic form, exhibiting the usual symptoms of general lassitude, unsteady gait, difficult breathing, frequent cough, and loss of flesh. Five of the affected animals were killed by bleeding and post-mortem examination was made.

CASE I.

Jersey Red sow, about 80 pounds in weight, in fair order. The middle lobe of the right lung was œdematous; the flesh was colored in its lower four-fifths, and the bronchii of the affected portions filled with a tenacious opaque white mucus. The left lung was œdematous in the lower half of the middle lobe. The liver, spleen, kidneys, bladder, and stomach were normal; the cæcum was empty and showed several ulcers, chiefly about the ileo-cæcal valve, one-fourth to three-

eighths of an inch in diameter, the ulcer covered with a thick, tough, yellowish white membrane; the large intestines contained a few similar ulcers in upper portions.

CASE II.

Spotted boar pig, weight about 30 pounds, very weak, difficult "thumpy" breathing, frequent cough, temperature 105.8° F. On post-mortem examination the right pleural cavity was found to be obliterated and the right lung closely adherent to the chest walls throughout, except at one point at the lower portions of the lung, where there was interposed a dirty gray fibrinous clot, circular in shape, being 2 inches across and one-eighth of an inch in diameter. The lobes are not distinguishable; the anterior portion was strongly œdematous and the bronchii filled with tenacious mucus. The left lung was adherent to the chest wall at the lower border; the lower portion of the anterior lobe was œdematous, the other portions congested. The bronchial lymphatics were hæmorrhagic, dark red; the liver, kidneys, bladder, stomach, and small intestines presented no unusual appearances; the cæcum showed five large ulcers, three-eighths of an inch in diameter, covered by thick, tough, dirty, yellowish white membrane about the margin, while in the center was a prominent convex, tough, black, necrotic patch one-fourth of an inch in diameter; the large intestines were filled with soft alimentary matter and showed a few ulcerated patches.

CASE III.

A barrow, weighing about 40 pounds, in fair condition, breathing labored, temperature 101.2° F. It had been castrated about two months previously, and the wounds had remained open, much swollen, and contained diphtheritic fetid accumulations. The anterior and middle lobes and the lower portion of the posterior lobe of the right lung and the anterior lobe and one-third of the posterior lobe of the left lung were œdematous, the bronchial tubes and bronchioles filled with mucus and pus; the sublumbar lymphatics were engorged and dark red; the liver was engorged and mottled in appearance; the gall bladder contained about half an ounce of thick, flocculent bile; the cæcum contained a quantity of gravel, and the ileo-cæcal opening was ulcerated and showed at one side an inflamed patch one inch across; the large intestines contained six or seven large ulcers, some affecting the entire thickness of the intestinal walls.

CASE IV.

Barrow, weight about 50 pounds, temperature 104.4° F. The anterior third of the anterior lobe, the lower portions of the middle lobe, and several small areas in the posterior lobe of the right lung were œdematous; the left lung was œdematous in the lower portion of the

middle lobe, and the middle lobe was adherent to the chest walls; at the juncture of the middle and the posterior lobes a portion of the lung was firmly hepatized; the cæcum and large intestines were healthy.

CASE V.

Sow, weight about 50 pounds, temperature 103.6° F. The right lung showed numerous œdematous areas; the left lung was œdematous in the anterior lobe and in small areas of other portions; the pericardial sac was obliterated and the pericardium firmly adherent to the surface of the heart; the cæcum showed one ulcerated patch; the other organs were normal.

HOG CHOLERA THE DISEASE.

The diagnosis indicated that the disease from which these animals suffered was hog cholera.

The conditions in the northern Rocky Mountain district are, in one noticeable respect, very unfavorable for swine breeding. The farmers have not yet learned that isolation should be the chief factor in the prevention of contagious diseases. Furthermore, the popular belief is that hog cholera will not exist at this altitude, and consequently no precautions are observed against it.

Swine in this section are generally confined for a short time during the short cropping season of this altitude and are then allowed to roam at will, getting their living from waste grain left upon the fields, from alfalfa, etc. As the fences are mostly of three barb wires, they are effective only against the larger domestic animals, so that swine go from farm to farm and the herds of various farmers mingle indiscriminately.

Otherwise the opportunities for limiting the ravages of hog cholera are better in this region than they are in the Mississippi Valley, as the hog-producing areas are comparatively small and isolated from each other, with scant interchanges of stock between them.

THE TWO DISEASES NOT THE SAME.

The common supposition about Idaho Falls, that the two affections—of horses and hogs—are identical and due to a common cause, is sufficiently refuted by the ante-mortem and post-mortem examinations recorded herewith. It may be added, moreover, that no clinical or historical evidence of identity could be established through other obtainable facts.

INVESTIGATION OF ALLEGED RABIES IN NEBRASKA.

By W. H. GIBBS,

Veterinary Inspector, Bureau of Animal Industry.

Acting upon instructions from the Chief of the Bureau of Animal Industry under date of August 9, 1896, I visited the farm of David Braddock, near Burr, Otoe County, Nebr., to investigate an alleged outbreak of rabies which was reported to exist at that place.

I reached Burr August 11. I succeeded in seeing Mr. Braddock the same evening, and told him the object of my visit. He informed me that all his stock seemed to be in a healthy condition at that time, and that no deaths had occurred since August 2, 1896. Knowing that what information I obtained must be from him I asked that he give me an accurate and detailed description of every circumstance connected with the outbreak, which he did.

He began by saying that previous to the loss of his stock he owned a small shepherd dog that had always been kind and docile, and was never known to attack any domestic animal unless told by his master, always going to the heels and snapping. This dog had been on the same premises continuously for more than two years.

May 2: The dog acted strangely and attacked a boy savagely, tearing the hat brim from his hat while on the boy's head. Shortly after, without any encouragement or provocation, he attacked a hog in a ferocious manner. During the day he attacked another small boy, a son of Mr. Braddock, his teeth barely reaching his face, but not lacerating the cuticle. Mr. Braddock was by this time satisfied that the dog was dangerous, and concluded to destroy him in the morning.

May 3: The dog could not be found, and was never seen on premises again; but a dog answering the description was killed a few miles distant while acting in a strange and violent manner. About the 10th of May a hog, previously healthy, developed peculiar and violent symptoms unusual to swine, namely, rushing at real and imaginary objects, jumping in the air, all feet off the ground at once, suddenly stopping and circling usually in one direction. During the sixteen days subsequent 14 swine were attacked with symptoms very similar to the above mentioned, all ending in death two or three days after.

May 28: A 5-year-old cow, giving milk, was taken with peculiar and violent symptoms while in the pasture with other cattle. The symptoms were violent, running and bellowing, and excessive trembling, due, no doubt, to great nervous excitement. The owner

attempted to drive her to the yard, but before going far the cow fell to the ground, where she died thirty hours later. This carcass was the only one herein mentioned that was examined by the owner after death. He detected nothing abnormal except gall bladder, that being exceedingly large and extended. (I am of the opinion that his knowledge of such matters is very limited.)

May 31: A yearling heifer was attacked with symptoms very similar to the case just mentioned, but more aggravated and violent. She rushed at everything within reach. In a few hours she fell from exhaustion and died forty-eight hours later. -

June 22: A work mule, 5 years old, was taken sick with severe rigor, lasting several hours. On the following day it was apparently much improved and was put to light work, but the next morning was found in the stable in a violent condition, snapping and plunging at every moving object within its reach. It tore the frog from its own feet and lacerated the tendons from its own limbs with its teeth. When utterly exhausted and unable to stand from the effects of its injuries it fell to the ground, where it was destroyed. The duration of the attack was four days.

July 28: A yearling filly that had been in pasture containing timothy, clover, and alfalfa was taken with premonitory symptoms similar to the case above mentioned. As the disease progressed weakness of the loins was noticed. She continued to fail in strength, owing, I presume, to nervous exhaustion, and twenty-four hours subsequent to the attack fell to the ground and died twenty-four hours thereafter.

As this report will show, there was a loss of 14 hogs, 2 bovines, 1 mule, and 1 colt that had died from this disease. There was not any disease among other herds in this vicinity. The management of the stock was good as near as I can learn from Mr. Braddock, and my own observation confirms my belief. The cattle and horses were fed from pastures containing tame grasses and had good pure water raised by windmill. The land was high and rolling. The swine, 35 in number, were kept in an inclosure of about 1 acre set in trees; were fed on slop from the kitchen and corn on ear with an occasional feed of green corn, with well water for drink. None of the stock mentioned received medical treatment, neither were they seen by any medical man. Every animal attacked died. The dog in question had attacked and killed two or three polecats previous to his strange actions.

In view of the circumstances connected with the case, I am inclined to the belief that the stock died from the effects of rabies communicated to them by the dog.

In making this report I would say that it is far from satisfactory to me, owing to lack of scientific knowledge of different conditions, such as the condition of the pulse, the temperature, and the pathological conditions that careful ante-mortem and post-mortem examinations would reveal.

SOME AGRICULTURAL EXPERIMENT STATION WORK.

COMBATING ANTHRAX IN DELAWARE.

[A. T. Neale, Bulletin No. 32, Delaware Experiment Station.]

Director A. T. Neale, of the Delaware Experiment Station, says that every case of anthrax recorded in that State since 1892 may be regarded as belonging to some one of five distinct centers. The first outbreak was in 1892, when nine farms within a radius of 1 mile of the one first infected suffered heavy losses of milch cows and working stock. Six of these farms have escaped subsequent attacks, and four years elapsed before the disease reappeared on the seventh. The eighth farm remained free. "The ninth and last farm represents the gravest aspect of this epidemic. In 1892 the losses were severe, and the tenant sought a new home. In 1893 his successor lost all of his cows by anthrax, and was obliged to abandon farming. In 1894 a similar fate seemed to await the third tenant. He, however, realized his position in time to save more than one-half of his herd. The occupants of this farm in 1895 and 1896, it is reported, have kept no dairy herd, have quarantined a certain field against their work stock, and have escaped without loss."

The second outbreak occurred in the midsummer of 1893, when four adjoining farms were involved. Three animals from the first farm were burned the day following their death, and no subsequent losses have occurred. Proper precautions were not taken upon the other farms and the losses were severe. In 1894 and 1895 the disease remained upon one of these farms, but has yielded to vaccination since. Upon another place it did not appear in 1895 and 1896, but no reason appears for this good fortune.

The third and fourth centers of contagion were established in July, 1895. Sixteen farms were affected and 50 cows, horses, and mules died. Thirteen head of stock were lost from the third outbreak before assistance was secured and 9 from the fourth outbreak. The sick animals were isolated, infected fields quarantined, carcasses cremated, and survivors vaccinated. The result was complete immunity in 1896 on thirteen of the sixteen farms, and the remaining three were but slightly affected.

The fifth outbreak occurred in June, 1895. "The source of the disease probably came from the sewage of a morocco shop." A year later the disease occurred on two additional farms, "probably from the same

source." Precautions were taken to cremate the carcasses, to fence the stream, and to exclude the herd, and so subsequent losses were avoided.

After a careful study of the five centers of contagion, Director Neale gives "a summary of the experiences of the past five years," as follows:

Every case of anthrax which has been recorded in Delaware since the spring of 1892 may be regarded as belonging to some one of five distinct centers of contagion. The belt of territory in which these centers occur is, approximately, 3 miles wide and 40 miles long. It passes through a well-developed dairy section, and is frequently crossed by tide water creeks or streams. A marked characteristic is its acreage of banked meadows.

The centers of contagion have been confined to fields upon the waterways and lowlands subject to tidal overflow because of faulty sluices or broken dikes. Four years of close inquiry has failed to establish a case of transfer of anthrax by live stock or farm products from one of the old to one of the new centers. The accepted opinion is that in four out of five instances the cause of each new epidemic has been floated ashore from the Delaware River. In the fifth case sewage from a morocco shop contaminated the water supply of each of the infected farms.

During the past five years anthrax has cost Delaware farmers, in the aggregate, 30 horses and mules, 190 milch cows, and a relatively small number of sheep. As these animals died upon 33 different farms, the average is considerably lower than 2 deaths per farm per year. The claim is made, however, that this average has been very much influenced by the timely adoption of necessary precautions, for at the beginning of each epidemic such records as the following have been made, namely, 7 cows lost out of a herd of 10, 13 lost out of a herd of 18, 33 lost out of a herd of 40.

While anthrax must still be regarded as a most dangerous and deadly disease, reports of new outbreaks no longer awaken the alarm which characterized the epidemics of 1892 and 1893. A clearer insight as to the nature of this trouble and demonstrations that it yields to proper management are responsible for this change. Proper management upon an infected farm involves the cremation of the carcass of every victim, the temporary quarantine of suspected pastures, the isolation of visibly diseased animals, and finally the vaccination of all susceptible live stock. This course properly observed will permit of the subsequent grazing of infected fields, with little if any risk of further losses.

Director Neale announces in this bulletin that in future the station must decline to continue the work of eradicating anthrax, leaving this duty to fall upon the individual or the State officials, and gives as a reason that such work is not contemplated in the Hatch Act.

[Bulletin No. 37, Delaware Experiment Station.]

It will be observed by referring to one of the paragraphs above that one of the outbreaks of anthrax in Delaware was attributed to the sewage from a morocco shop. In this connection, two outbreaks which occurred in Pennsylvania are of interest and importance. "The first occurred upon the banks of a stream which is tributary to the Susquehanna, near its source; the second bore a similar relation to the head waters of the Allegheny River." It is believed that these outbreaks had their origin in a cargo of hides which had been im-

ported from China. These hides were tanned in yards located along these waterways. "During this work several cases of sickness occurred among tannery employees, six of which terminated fatally. The death rates in the herds which grazed along the stream below the tanneries were also relatively heavy." As these hides were arsenic cured, it was at first stated that the death of both men and live stock was due to that poison, but "later it was determined beyond all question that the bodies of the victims contained the bacilli of anthrax," and that to these bacilli the deaths could be directly charged.

The governor of Pennsylvania addressed a letter to the Secretary of the Treasury requesting the enforcement of section 25 of the act of Congress of July 24, 1897, which section reads as follows:

That the importation of neat cattle and the hides of neat cattle from any foreign country into the United States is prohibited: *Provided*, That the operation of this section shall be suspended as to any foreign country or countries, or any parts of such country or countries, whenever the Secretary of the Treasury shall officially determine, and give public notice thereof, that such importation will not tend to the introduction or spread of contagious or infectious diseases among the cattle of the United States; and the Secretary of the Treasury is hereby authorized and empowered, and it shall be his duty to make all necessary orders and regulations, to carry this section into effect, or to suspend the same as herein provided, and to send copies thereof to the proper officers in the United States, and to such officers or agents of the United States in foreign countries as he shall judge necessary.

The correspondence resulting from this request is given herewith in detail:

UNITED STATES DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., September 14, 1897.

SIR: Referring to your letters of the 26th and 31st ultimo concerning the alleged outbreak of anthrax at Falls Creek, Pa., supposed to be due to infection from hides imported from China, I have the honor to state that this Department has made as careful investigation of the whole subject as is possible in a limited time. Your suggestions concerning the potency of the disinfection recommended for foreign hides, and secondly, as to whether the gravity of the situation may not demand a strict enforcement of section 25 of the act of July 24, 1897, so as to wholly exclude the importation of hides of neat cattle from countries having inefficient sanitary laws, have been duly considered.

It appears that anthrax is a disease which exists in most countries, and it is particularly common in Asiatic countries, in Africa, and in South America, but it also exists even in those European countries which have the best sanitary laws and regulations. It is plain that the introduction of the disease could not be prevented with hides unless we excluded this article of commerce coming from the principal countries from which importations are made. The extent to which our leather manufacturers depend upon such imported hides makes the prohibition of such importations an exceedingly serious question. Unfortunately the authority granted in section 25 of the act of July 24, 1897, is not sufficient to protect the country from the importation of anthrax contagion, as it only applies to the hides of neat cattle, while the hides of sheep, goats, and other animals, as well as hair and wool, are equally liable to bring the contagion.

It may be admitted that disinfection with sulphur dioxide is inefficient for the purpose of destroying the germs of anthrax, and if we consider that these germs

are found throughout the hide, and that in order to destroy them any disinfectant must be made to penetrate to the interior of the hide, we must conclude that even the most powerful disinfectants are unreliable for this purpose. It does not appear that the rules for disinfection which were recommended by this Department can be improved upon, with our present knowledge, without seriously damaging the hides disinfected. The question for decision, therefore, resolves itself into the proposition as to whether, under the circumstances, it is advisable to prohibit the importation of foreign hides on account of the outbreak of disease which occurred at Falls Creek, Pa. There appears to be a difference of opinion as to whether the disease there was anthrax or whether it was arsenic poisoning from the arsenic with which the hides were cured, and which adhered to them in considerable quantities. It is possibly too late now to obtain information from which a positive diagnosis can be made, but if we admit that the disease was anthrax, I should be of the opinion that the Government would not be warranted in excluding hides to the extent which would be necessary to accomplish any good, and by such exclusion to seriously damage one of our greatest industries. Anthrax is a disease which has been frequently imported into this and other countries with wool and hair, as well as hides, and, so far as I am aware, none of the leading countries of the world have prohibited the importation of such articles on this account. I would recommend, however, that a letter be sent to our consuls abroad, instructing them to refuse to allow the shipment of hides from districts in which anthrax is known to occur. This might have a beneficial effect, although there is some doubt as to whether the consuls have sufficient information to enable them to discriminate in such matters, since some of these officers have frankly stated that the regulations for the disinfection of hides were not and could not be enforced by them.

Very respectfully,

JAMES WILSON, *Secretary.*

The honorable the SECRETARY OF THE TREASURY.

DEPARTMENT OF STATE,
Washington, D. C., September 27, 1897.

To the consular officers of the United States:

GENTLEMEN: The following letter from the Secretary of the Treasury, of the 18th instant, is communicated to you for your information and guidance:

"Referring to section 25 of the act of July 24, 1897, which prohibits the importation of the hides of neat cattle from any foreign country into the United States, and to Department's circular of November 22, 1895 (S. 16557), permitting the importation of such hides if properly disinfected under authority conferred on the Secretary of the Treasury by said provision of law, I have the honor to request that our consular officers may be instructed to refuse authentication of invoices of hides of neat cattle from districts in which the cattle disease anthrax is known to exist. This request is made on the advice of the Secretary of Agriculture and in view of the fact that an outbreak of anthrax has lately occurred at Falls Creek, Pa., resulting in the death of animals and human beings in consequence of the manipulation in tanneries at that place of the hides of cattle imported from China."

You are directed to comply strictly with this instruction.

Respectfully, yours,

THOS. W. CRIDLER,
Third Assistant Secretary.

[Circular.]

DISINFECTION OF THE HIDES OF NEAT CATTLE SHIPPED TO THE UNITED STATES.

TREASURY DEPARTMENT, OFFICE OF THE SECRETARY,

Washington, D. C., November 22, 1895.

To collectors of customs and others:

Representations having been made to this Department that the process promulgated in its letter of November 14, 1895 (Synopsis 16385), for the disinfection of hides of neat cattle intended for shipment to the United States is attended with injury to hides, the following method, which is intended solely for the protection of cattle in this country, and which is suggested by the Department of Agriculture, is adopted hereby, and will be required in all cases of shipment of such hides, when not dry-salted or arsenic-cured, from the countries of Europe, Asia, Africa, Australia, and South America, viz:

Dry hides which have been salted or arsenic-cured may be accepted as having been disinfected by the process of curing, and need not be submitted to any further treatment. Dry hides which have not been salted or arsenic-cured should be disinfected. Disinfection with sulphur dioxide may be accepted in case a room is provided which can be tightly closed, and also in case the bundles of hides are undone and each hide suspended separately from the ceiling in such manner that there may be free circulation of the sulphur fumes and that all parts of the surface may be acted upon. There should be at least 4 pounds of sulphur burned to each 1,000 cubic feet of air space, and the room should be kept closed and the hides subjected to the sulphur dioxide for six hours; or the dry hides may be immersed in a 4 per cent solution of carbolic acid or a 1 to 1,000 solution of bichloride of mercury until they are thoroughly wet with the disinfectant. Fresh or moist hides, whether salted or not, should be disinfected by immersion in a 5 per cent solution of carbolic acid or a 1 to 1,000 solution of bichloride of mercury.

It is further directed that hides of neat cattle, other than dry-salted or arsenic-cured, the product of the countries above named, will require disinfection as above whenever they shall be shipped via the ports of any other country; and that hides, other than dry-salted or arsenic-cured, the product of any country not named above, if transhipped and actually landed at ports in any of the countries named, will require disinfection.

It should be understood that the regulations herein provided do not in any way modify or affect any regulations concerning disinfection issued under the quarantine laws of the United States.

S. WIKE, *Acting Secretary.*

TREASURY DEPARTMENT, OFFICE OF THE SECRETARY,

Washington, D. C., January 25, 1898.

SIR: Referring to Department's letter of the 3d instant in regard to the outbreak of anthrax in Pennsylvania, I have to advise you that the Department is in receipt of information, through the Secretary of State, that the consul-general at Singapore has refused to certify invoices of hides which come from a district where anthrax is known to prevail.

Respectfully, yours,

W. B. HOWELL,
*Assistant Secretary.*MR. ARTHUR T. NEALE,
Delaware College, Newark, Del.

TREASURY DEPARTMENT, OFFICE OF THE SECRETARY,

Washington, D. C., January 31, 1898.

SIR: As a reply to your letter of the 26th instant, in regard to the prohibition of the importation of hides of neat cattle coming from districts where anthrax exists, I transmit herewith a copy of a letter this day addressed to the Secretary of State in the matter.

Respectfully, yours,

W. H. HOWELL,

Assistant Secretary.

MR. ARTHUR T. NEALE,

Delaware College Agricultural Experiment Station, Newark, Del.

[Inclosure.]

TREASURY DEPARTMENT, OFFICE OF THE SECRETARY,

Washington, D. C., January 31, 1898.

SIR: Referring to your letter of the 20th instant, in regard to the refusal of the United States consul-general at Singapore to certify invoices of hides coming from districts where anthrax is known to exist, I have the honor to request that the consul-general may be instructed to continue to refuse such certification until he shall be satisfied beyond all doubt that the disease has disappeared in such districts, and to refuse certifications of invoices of hides packed and stored in warehouse which were stripped during the period when the disease mentioned was prevalent, this Department being advised by experts that the germs of this disease remain in affected hides for an indefinite period.

It is respectfully suggested that the contents of this letter be made known generally in connection with the circular of your Department of September 27, 1897, to consular officers in hide-exporting countries.

Respectfully, yours,

L. J. GAGE,

Secretary.

To the honorable the SECRETARY OF STATE.

The conclusions reached by the study of the national rules and enactments are summed up as follows by Director Neale, of the Delaware Station:

(1) As far as anthrax is concerned, dry hides, salted or arsenic-cured, can no longer be regarded as free from disease germs, and any process of disinfection which is searching enough to combat anthrax will accomplish the destruction of the hides. Hence, the disinfection rule of the Treasury Department, dated November 22, 1893, is not efficient.

(2) Section 25 of the act of Congress of July 24, 1897, is not broad enough to protect the country from anthrax importations, for the spores of this disease occur at times in sheep and goat skins, in hair and in wool, all of which products are largely imported, and no one of them is recognized in the above section.

(3) Orders to consuls to refuse certificates on invoices of hides, etc., for exportation into this country from lands where anthrax prevails may accomplish much good. It is not to be expected, however, that consuls shall in all cases have the technical information necessary to decide whether anthrax is or is not prevalent in the country to which they are accredited.

The barriers erected by the National Government against anthrax importations are not impregnable, nor can they be improved materially. The absolute exclusion of all products which are liable to be carriers of anthrax would not now avail, for foci of contagion have been established in several sections of this country for twenty years at least. The work of controlling this disease can be advanced materially by the national laws, but the major portion of that work must fall upon State and local authorities.

In this bulletin Professor Neale emphasizes the importance of vaccination and of cremating every carcass and all straw, litter, etc., with which the carcass may come in contact. The soil should be thoroughly roasted, as the blood from a carcass will frequently stain it to a depth of 6 inches.

SERUM THERAPY IN HOG CHOLERA.

[A. T. Peters, D. V. M., Bulletin No. 47, Nebraska Experiment Station.]

Serum therapy is a treatment upon the theory "that the blood serum of animals, rendered artificially immune against certain infectious diseases, injected into another animal will protect it against such disease or even cure it after infection." (Dr. Behring.) This treatment is being used in various diseases, such as tuberculosis, rabies, pneumonia, enteric fever, typhus, cholera, syphilis, streptococcus infection, cancer, tetanus, diphtheria, swine erysipelas, and in snake bites.

At the station the liquid cultivating medium for hog cholera bacilli is prepared as follows:

One kilogram of lean beef is boiled in 4 liters of distilled water for five hours. It is then strained, and neutralized with a caustic soda solution. Then 40 grams of common salt are added (10 grams per liter). This infusion is sterilized by discontinuous steaming in stock flasks of convenient size, and incubated thoroughly before it is used as a cultivating medium. These flasks are then charged with blood from the heart of an animal which had a mild attack of hog cholera. The inoculating rod is made of a piece of platinum wire fastened to the end of a glass rod. This rod is passed through a flame until the wire at its end becomes red hot. It is then allowed to cool a moment. After dipping the end of the wire into the blood of the heart the cap is removed from the flask containing the culture medium and the charged rod is quickly introduced and withdrawn. This is repeated three times, removing and replacing the cap each time.

The flask is then placed in the incubator for from two to four days. Soon the germs begin to multiply and the previously clean culture medium becomes cloudy and milky. At the end of three or four days the culture is ready for use. The hog cholera cultures used at the laboratory to make horses immune were of the first generation. The horses selected at the station for this purpose are healthy, strong, and large animals of good disposition. The circulation, respiration, and temperature must be normal, and they must be free from any disease, and must have undergone the mallein test for glanders.

The use of this culture is begun by a small injection of 5 cubic centimeters at the thorax or flanks and the injection gradually increased to 200 cubic centimeters in several months. "The effect of the hog cholera culture upon the system of the horse is mainly a rise in temperature of $1\frac{1}{2}^{\circ}$ to 3° , a quickened circulation and accelerated respiration, but not in a very pronounced type." In order to obtain this serum, the horse is bled.

For one week prior to the bleeding, the horse must be free from all toxic symptoms, during which time it receives no more injections. The horses so bled appear

to suffer no inconvenience from the same, but on the contrary are more lively and have an increased appetite. The amount of hog cholera culture an animal receives is no indication of the strength of the antitoxin obtained. Therefore it is necessary that the serum from each and every drawing should be tested. When the blood is drawn, it passes into two sterilized flasks and is kept in the refrigerator in the laboratory for three or four days to allow the clot to press out the serum. The serum is then siphoned off into a large bottle and filtered through a large Chamberland filter. This filtered serum is then put up in bottles, holding 100 cubic centimeters each, which are set in a dark, cool place, ready for use.

Experiments have shown that it requires from 8 to 10 cubic centimeters of blood serum to render a hog immune.

In order best to show the results of the use of this serum, the detailed record of the experiments are quoted in full below:

Hog No. 1 was a Poland China sow weighing about 100 pounds. She was in good health at the time and was inoculated with 1 drop of blood taken from the heart of a small pig that had died at the laboratory with hog cholera. She was inoculated on August 6, 1896. The sow received at the same time 10 cubic centimeters of blood serum from horse No. 1. August 7 the animal was in good condition and showed no signs of any disease. August 9 at the seat of the inoculation could be seen the formation of a small abscess, which was undoubtedly caused by the injection of the blood, which had a number of putrefying germs in it in connection with the hog cholera bacilli. On August 11 the abscess broke and discharged pus, but the animal showed no signs of disturbance. August 15 the abscess had healed and the animal was to all appearances healthy. On August 20 the animal was sent to Mr. C. A. Morrill, Stromsburg, so that he might put the animal in an infected herd and have the owners feed it dead material. The animal remained at Mr. Morrill's farm for about a week, for at that time there was no suitable outbreak where the animal could be placed. After eight or ten days Mr. Morrill placed the animal in a herd where the owner had lost 20 head and still had 15 sick. These remaining 15 died, but the inoculated hog remained there two weeks after the last one had died. Then Mr. Morrill took the animal back to his own farm in order to place it in another infected herd, but during this time the animal sickened and died. We were notified too late, and did not receive any blood, nor could we make any post-mortem, but Mr. Morrill is certain the animal died of cholera, as he stated that the animal showed all the symptoms of cholera.

Hog No. 2: This animal was inoculated August 6, 1896, at 10 a. m., and received blood from the same animal as did hog No. 1, but hog No. 2 did not receive any serum, and was tagged "unprotected." On August 6, at 6 p. m., the animal was very dull. It would lie down most of the time, and did not partake of the noon ration. The animal could not be aroused in the evening, and did not seem inclined to take any food. August 7, at 8 a. m., the animal was a little better. It had partaken of half of the morning ration. On August 8 the animal began coughing and showed the characteristic red spots on the abdomen and flanks. August 9, at the seat of inoculation, could be seen the formation of a large abscess. August 10, 1896, the animal lay on the abdomen most of the time, partook of little or no food, and coughed very frequently. August 11 the animal seemed falling off in flesh, having taken up no food. August 12 condition not changed. August 13 about the same. August 15 animal found dead; must have died during the night. On post-mortem the characteristic lesions of hog cholera were found.

Hog No. 3 was inoculated August 18, 1896. It was a shoat weighing about 100 pounds. It was inoculated with the blood sent in from Broken Bow. It received with this 1 drop of blood 10 cubic centimeters of serum. On August 19 the animal seemed in good health. On August 20 the same. September 15 the animal

seemed to cough a little. On September 16 the condition was no better. On September 17 the animal was found dead in the stall. On September 18 post-mortem revealed that the subcutaneous skin all along the abdomen was perfectly yellow. The lungs revealed no congestion nor any deposits of any kind. The kidneys were enlarged, and the liver was very much enlarged and hard. On opening the bile duct we found that it was obstructed with worms and that it was very much enlarged and distended. Judging from the post-mortem appearances, the hog did not die from cholera. Microscopical examination also revealed no bacilli.

Hog No. 4: This hog received August 18, 1896, 1 drop of blood sent in from Broken Bow and 10 cubic centimeters of serum. August 19 the animal seemed in good health. August 20 the same. October 17 the animal was sent to Mr. John Reese, of Broken Bow, to be placed in a herd that was infected with hog cholera. On October 20 Mr. Reese placed it in a herd owned by Mr. George Carr, which was dying with cholera. On December 14 this hog is still alive and is doing well.

Hog No. 5: August 18, 1896, the animal was inoculated with 1 cubic centimeter of blood sent in from Broken Bow, and tagged "unprotected." August 19 the animal would not partake of anything. August 20 the animal was very sick and commenced to cough and ate but very little. August 21, condition was no better. The animal lay down most of the time. August 22, condition about the same; 23, no change; 24, the animal was found dead. Post-mortem revealed that the intestines and lungs were very much inflamed. Numerous swine plague bacilli were found in the lungs, while in the spleen the hog cholera bacilli were found abundant.

Hog No. 6: This animal weighed about 100 pounds, was inoculated with 1 cubic centimeter of blood August 18. August 19 the animal was very dull. August 20 the animal took very little nourishment. August 21 the condition was about the same. August 22 the animal began to cough quite freely. August 24 the animal seemed but little better. There was a noticeable wasting away of flesh. August 27 the animal's condition about the same. August 28 the animal was found dead. Post-mortem examination revealed the characteristic appearance of hog cholera.

Hog No. 7 was inoculated September 15 with 10 cubic centimeters of serum and 1 cubic centimeter of a virulent culture of hog cholera 4 days old. On September 16 the animal seemed in good health. On September 18 no abscesses had formed as yet. From all appearances the animal enjoyed good health. At this date, December 14, the animal is still alive and is ready to be sent into an infected herd.

Hog No. 8 was treated with 10 cubic centimeters of serum and 1 cubic centimeter of culture. At this date, December 14, it is ready to be sent into an infected herd.

From the experiments it will be seen that the unprotected animals have died, and there are only two cases where a protected animal died from the disease; in fact, I might say one, if I did not count the one which had the yellow appearance and the obstructed bile duct. The one that was sent to Mr. Morrill led us to presume the blood serum had only a limited power of immunity, or that the animal did not receive a sufficiently large dose of serum. This is very distinctly seen in the herds of Messrs. Joseph and George Hedge. Their herd was inoculated August 6, 1896, when the disease was raging all around them. Their herd did not take the disease until eight weeks later, when the herd was infected and all but seven were lost. The other herd was Mr. Z. S. Branson's. His herd of 36 head was inoculated August 6, 1896. The disease was on the adjacent farm, but he did not report a loss until eight weeks later, when he lost all but 13. Mr. D. Hedge had his herd of 42 head inoculated. Fourteen of these were small pigs, 24 shoats, and 8 sows.

He had the disease on his place, 3 having died before treatment. At the time of treatment it seemed to check the disease for about five weeks, when after that time he lost all but 6.

From these investigations we judge that the serum injected alone has only a limited power of immunity. We have therefore experimented with the antitoxic serum in connection with a virulent hog cholera culture, injecting approximately per body weight about 10 cubic centimeters of antitoxic serum to 1 cubic centimeter of virulent hog cholera culture. We have lately treated 12 head for the experiment station in this manner, with good results thus far. The animals manifest no disturbance from the inoculation. Up to the present date we have by this method not produced the disease and hope to lengthen the duration of immunity through it.

The following is a list of the field experiments:

Results of use of hog cholera antitoxin.

Number of experiment.	Treated.	Sick.	Saved.	Number of experiment.	Treated.	Sick.	Saved.
1	12	2	10	18	17	8	15
2	64	18	53	19	18		18
3	15	11	7	20	21	21	21
4	103	22	30	21	11	4	10
5	39	6	9	22	47	6	40
6	18	7	17	23	98	50	50
7	25	20	8	24	43	Many.	43
8	42	4	11	25	50		
9	57	10	14	26	23		7
10	7	7	3	27	43	7	7
11	36	3	13	28	21		6
12	17	17	15	29	28	1	11
13	1	1		30	27		27
14	8	8	3	31	15	15	6
15	57	5	9	32	118		118
16	12	12	8	33	12		12
17	66	14	55	Total	1,176	339	650

From the above table it will be seen that out of 1,176 animals treated a little more than 56 per cent were saved. The exact number of animals that showed signs of sickness can not be given, since in a few instances this was not reported. In those cases which showed no signs of sickness at the time of treatment, cholera was raging in the neighborhood, so that the animals had been exposed to the disease.

HOG CHOLERA AND SWINE PLAGUE IN INDIANA.

[A. W. Bitting, D. V. M., Bulletin No. 56, Indiana Experiment Station.]

Historical.—Many breeders regard hog cholera as of recent introduction, but the "Report on hog cholera," issued by the Bureau of Animal Industry in 1889, is quoted to the effect that the disease existed in one county in Indiana in 1840. The State Agricultural Report for 1859-60 referred to the frequent outbreaks of the disease and the heavy loss it had caused. The contagious nature of the dis-

ease seems to have been well understood, and the preventive measures recommended are in the main the same as those advised at the present. The legislature of 1867 passed a law requiring the burning or burial of all carcasses of animals dying from the disease, and this law is still upon the statute books.

Statistical.—In 1886 it was estimated that 80 per cent of all hogs that died from disease were victims of hog cholera. The following table shows the number that died during the nine years in which a record was kept:

Loss of hogs by cholera in Indiana.

Year.	Number.	Year.	Number.
1882-83	288,286	1888	326,350
1883-84	351,156	1889	247,114
1885	326,555	1890	256,991
1886	402,164	1891	278,143
1887	512,692	Total	2,989,400

No record was kept for the years 1891, 1892, and 1893, and the data for 1895 is not yet available. It is estimated from recent data, however, that the loss for 1895 was \$2,500,000. In some localities not enough hogs were left for breeding purposes.

Characteristics of the disease.—The investigations show two diseases, hog cholera and swine plague. Both are caused by a microbe or germ, both occur under similar conditions, and have general symptoms so much alike that it is difficult to distinguish between them. They differ in this respect, that the germs of *hog cholera* are longer than those of swine plague, are more resistant to climatic conditions and other influences that affect low forms of life; they obtain entrance to the body through food, water, and air; young pigs are especially susceptible and may die when older ones have a mild attack or escape altogether; the intestines are the primary seat of affection; the disease is more readily communicated than swine plague. The germs of *swine plague* are believed to gain entrance to the body mainly through the air; the older and fatter hogs suffer the greatest fatality; the lungs are the primary seat of affection.

The symptoms of the two diseases are much alike. They vary according to the severity of attack. Often the hog will be found dead before it is known to be ailing, while in chronic cases it may be sick for two or three weeks. The condition of the eyes gives early indications of disease; the mucous membranes become reddened and the lids gummy and glued together. The pigs appear chilly and lie in the sun when they would ordinarily remain in the shade. They will hunt for litter under which to secrete themselves. The appetite is lost and a diarrhea is developed. In the earliest stage constipation may be present. The attack may or may not be attended with a

cough, which may be frequent or only when the animal gets up from its bed. In breathing, the ribs seem to remain quiet and a quick jerk is seen in the flank at each expiration. Lameness in one or more limbs, stiffness of the back, thickening and cracking of the ears, scabs on the skin, purpleness of the belly or patches on the body are all attendant. In swine plague the respiratory symptoms are early developed and more characteristic than in hog cholera. On post-mortem the intestines and lungs are found to be points of attack.

Investigation.—A circular was addressed to 109 breeders in Indiana whose stock was more exposed to the contagion than that of their neighbors, as it was exhibited at fairs. The herds were frequently visited, and the following interrogatories submitted: "How many hogs do you raise each year? Have you had cholera in your herd during the past year? If so, how many hogs died? How introduced, if known? How close did the disease come to you? Was the loss light or heavy? What is the source of your water supply and how given to the hogs? If you escaped, what precautions were taken to prevent it? Give briefly your method of handling hogs."

Ninety-five replies were received, a summary of which follows: "The 95 breeders produced 11,000 hogs, of which they lost 822, or approximately 8 per cent, during a year of severe trial. Seventy-two breeders escaped the disease; 23 had it. Ten of the breeders could not account for its introduction into their herds; 1 fails to state how it was introduced, if known, and 12 account for its occurrence. The disease was on adjoining farms or within one-half mile of 55; in the neighborhood of 76, and not in the vicinity of 17. Sixty-two reported that the losses were severe, and 14 that they were light. Eighty-two had used wells or springs as the source of water supply; 13 used surface water or permitted access to it. The preventives recommended are pure water; cleanliness of quarters; removal of litter; care in feeding, particularly new corn; dividing the herd into bunches according to the age, and breeding to mature hogs. In addition to the concentrated foods, liberal allowance of salt, ashes, and charcoal were very generally recommended."

From the tabulated statement of the 95 replies the conclusions are drawn that the total loss was very low compared with the loss in the State as a whole, and that one-third of the loss is accounted for as having been caused by exhibiting at fairs, by purchase, by bringing in hogs to breed, etc.

Preventive measures.—Pure water, clean quarters, and litter removed and burned at least once a week; if new corn is given, feed judiciously; use liberal supply of charcoal, salt, and ashes, using one-eighth or one-tenth as much salt as charcoal and ashes; do not ship the hogs or allow them to roam on the farm; separate the sick ones from the well ones; dead hogs should be buried or burned.

The formula for hog cholera which was published by the Bureau of Animal Industry in Farmers' Bulletin No. 24 "has proved as efficacious as any we have heard of the past season," but the author himself recommends no medicinal treatment.

NECESSITY OF COARSE FEED TO GROW CATTLE.

[Eugene Davenport, M. Agr., Bulletin No. 46, Illinois Experiment Station.]

Four experiments were conducted with calves, all begun immediately after birth, in order to obtain, to some degree at least, an answer to the query, To what extent is it necessary to cater to the instinct and the appetite of the animal in the matter of nutrition? The plan in each experiment was to attempt to raise the calf to maturity with all conditions normal or the most favorable, except that it was deprived of all coarse feed. The feed given was ample in abundance and in variety. While at first it was not expected that much would be learned by the trials, the results pointed surely and accurately toward the principle that we can not offend with impunity the constitutional need for coarse feed.

The first experiment was upon a grade Shorthorn calf. Upon the first indication of a desire for coarse feed its bedding was removed and shavings substituted. Grain was fed early, but a phenomenal appetite was developed for bulky food. Its appetite was such that, if allowed, it would freely eat the shavings, bits of rope, etc. Although up to this time it appeared healthy, it consumed inordinate quantities of ground feed, composed of half corn and half oats, and at five months of age it consumed more than a half bushel daily. Dirt was eaten freely if obtainable. The expectation that these peculiarities would disappear and that the calf would become accustomed to its food was not realized. We quote:

At about four months the joints commenced to swell and the legs to stiffen. Later, by spells, the calf walked with a reeling motion, although at other times he played as would any other calf. One of the most peculiar facts noticeable was the body conditions as to flesh. It was poor, but not thin. Its muscles remained plump and exceedingly firm, not to say solid, to the touch.

At about five months there was an evident disturbance of the nerve centers, and, although the calf never missed a meal or suffered from disturbed digestion, it was evident that it could not long survive. It was at this time taking over a half bushel of grain daily with evident relish. It was now killed, and a post-mortem examination revealed nothing peculiar in the development of the internal organs. A great quantity of food was found in the stomachs, but there was no sign of inflammation or of internal disturbance of any kind. The one noteworthy feature of the carcass was the absolute lack of fat, either external or internal. This, together with the plumpness of the muscles, left the outlines of each clearly defined and not obscured, as is the case in normal specimens, in which the connective tissue, even in thin animals, carries considerable fat.

The second experiment was upon the offspring of a Holstein-Friesian cow and Jersey bull. This calf was put upon a diet of skim milk, and by August 1 had consumed 950 pounds, or 25 pounds a day.

The following table shows the progress of the experiment to January 11, when it refused milk:

Table showing amount of milk consumed, weight of calf, and amount of gain.

Month.	Amount of milk con- sumed.	Weight of calf.	Amount of gain.	Ratio of gain to milk con- sumed.
	<i>Pounds.</i>	<i>Pounds.</i>	<i>Pounds.</i>	
August	1,120	197	90	1:23
September	1,300	245	48	1:27
October	1,600	235	40	1:40
November	1,533	291	6	1:253
December	1,313	297	6	1:219
January 11	250	333	36	1:7

At the end of October there was a pronounced stiffness in the joints. At the end of November the stiffness had increased, accompanied by lessened activity and appetite. At the end of December the calf was in a bad condition—very stiff, disinclined to move, and indifferent as to whether it ate or not. The first ten days of January showed a phenomenal gain in weight, but a violent reaction set in on the 11th. The calf refused to stand and to take milk, and seemed nearly dead. "At 8 a. m. hay and straw were put before it and it ate greedily, evincing no choice between the two, and at 11 a. m., three hours after taking coarse food, it was ruminating for the first time in its life, and exhibited a brightened eye and a most contented expression of countenance. Before night it was standing up and moving about. Drank $6\frac{1}{2}$ pounds of milk." Hay and milk were given each day thereafter, and occasionally some other food, such as oats, oil meal, or silage, and the calf rapidly improved in condition and gained in weight. The experiment closed on March 31, when Director Davenport said the calf "was in every respect well, hearty, and growing, and as able and as disposed to be active as was any calf in the barn."

The third experiment was upon a grade Jersey, dropped May 1. The progress of the experiment was essentially the same as that of the one first above, except that its condition was not permitted to become so severe. The calf was first reported as "not doing well" the last week in September, and in the second week of October was given some hay. Hay and grain, as well as milk, were given daily thereafter till October 12, when the experiment closed, and when it was noted "calf greatly improved."

Experiment No. 4 was upon a grade Jersey which, on June 3, was 2 weeks old and taking 20 pounds of milk daily. It was designed in

this case to wean the calf and put it upon an exclusive diet of grain. The following table shows the progress:

Progress of experiment with a calf upon an exclusive diet of grain.

Week ending—	Milk used.	Grain used.	Bran used.	Oats used.	Water used.	Weight of calf.	Gain.	Remarks.
	Pounds	Pounds	Pounds	Pounds	Pounds	Pounds.	Pounds	
June 17	280	-----	-----	-----	-----	107	-----	
June 24	280	17½	-----	-----	-----	112	5	Grain, equal parts by weight, corn, oats, and wheat ground.
July 1	280	21	-----	-----	-----	122	10	Do.
July 8	280	21	-----	-----	-----	130	8	Do.
July 15	210	10	-----	-----	-----	137	7	Grain in equal parts by weight, corn and oats ground.
July 22	140	17½	-----	-----	-----	150	13	Do.
July 29	98	18	-----	-----	-----	152	2	Do.
Aug. 5	84	20	15	-----	-----	144	8	Getting poor.
Aug. 12	40	22½	18½	4	30	145	1	Not doing well.
Aug. 19	0	22	10	7	21½	143	2	Had 3 pound oil cake.
Aug. 26	0	17½	4	15	0	135	8	2½ pound oil cake.
Sept. 2	0	10½	-----	16	0	120	15	Appetite not good.

On September 5 and 6 the calf, having refused water for two weeks, was given a little milk, but on September 8 refused all food. Next day drank 8 pounds of milk, but was bloated badly. "It weighed now 167 pounds, and had apparently gained 24 pounds since August 20, when it refused water, and since which time it had drunk but 19 pounds. It weighed 47 pounds more than on September 3, when it refused all food and drink, and since which time it had consumed but 3 pounds of oats and 19 pounds of milk, not counting the few swallows recorded as 'a little.' The query is as to the source of this gain, and it would be most readily chargeable to error were it not that a like increase had been noted in both No. 2 and No. 3 at a similar stage in the experiment."

From this time until September 16 its appetite increased, and it seemed to rally without hay, but on this day, almost without warning, it died. This was the only one of the calves to show signs of a disturbed digestion.

The discussion of the data upon these experiments by Director Davenport is interesting, and is embodied herewith in full:

A close study of these animals, their feed, gains, and attendant symptoms, discloses certain peculiar and not a few abnormal and puzzling facts.

Rumination.—From the first it had been a query whether anything like normal rumination would follow the consumption of coarse grains like bran or oats in the absence of coarser food, but the closest observation failed to discover it until hay or straw was taken. No. 2 was contentedly chewing his cud for the first time at 7 months of age, three hours after his first meal of hay. With No. 3 it was not until five and one-half hours after the first meal of hay that rumination was noticed, and Nos. 1 and 4 never ruminated.

Absence of fat and character of flesh.—The total absence of fat, either internal or external, as revealed on post-mortem examination, particularly after the enormous amounts of food consumed, is unaccountable. No. 1 at 6 months of age was taking about one-half bushel of mixed grain per day, yet no fat was to be found even about the kidneys. But the muscles were not shrunken; on the contrary, they were plump and exceedingly dense. The animals would all attract instant attention. At a glance they looked poor, yet they were not thin like those that have suffered from insufficient food. Upon touching with the hand it would be noted instantly that the muscles were exceedingly hard, and that the general appearance of the animals is approached by those only that have been long on dry pasture with insufficient water.

Enormous consumption of food.—These experiments serve an important purpose in showing that the amount of food that is consumed is no indication of its economic use, and that enormous amounts may be taken in the vain attempts to satisfy an abnormal appetite. These animals were wanting something that they could not get, and, with the appetite of the first stages of dyspepsia, ate everything in sight. This is one of the symptoms of insufficient nutrition, which is but another name for the early stages of starvation, and is a condition of things that the careless feeder often brings upon his stock by poor care or insufficient food in early winter. That the rally, if made at all, will be made at great expense of food is more clearly shown in these experiments than by data heretofore possessed.

No. 1 ate at 6 months of age a half bushel of mixed grain per day. At 2 months of age No. 2 ate 40 pounds of milk daily, and rose to over 50 pounds at 4 months, which proved inadequate to its wants. After being allowed hay, the same calf made gains amounting to from 2 to 3 pounds a day on a ration of from 2 to 3 pounds of hay, 2½ to 3 pounds of grain, and 30 to 35 pounds of milk. No. 3 went to pieces at between 4 and 5 months, after consuming an average of 71½ pounds of milk daily for five weeks. This is 35 quarts per day, and it seems almost inconceivable that a Jersey calf, at less than 4 months, could consume so much.

Nondisturbance of digestion.—It would seem that such inordinate amounts of food must destroy a calf or at least lead to complicated disturbances within the machinery of digestion. In none but the last (No. 4) was any disorder of the kind noted. The bowels remained regular throughout and the droppings appeared normal. It raises a query as to the extent to which digestion was really accomplished and whether failure was primarily in the digestive apparatus or in the metabolic processes of the body.

Gains.—Some of the gains secured are worth noting. No. 2 in the first one hundred days gained 138 pounds on 3,380 pounds of skimmed milk, or 1 pound of gain for 25 pounds of milk. The same calf increased from 107 pounds to 333 pounds at seven months, a gain of 226 pounds, on an exclusive diet of skimmed milk. But the limit was reached and gains as high as 3 pounds per day were made later on a moderate feed of hay, grain, and milk. No. 3 gained less on his diet of milk, and in ninety days gained 108 pounds on 4,739 pounds of milk, or 1 pound of gain for 43 of milk. No. 3, although much smaller than No. 2, ate more milk, as will be seen, and put on less gain.

Sudden apparent heavy gains.—It will be remembered that No. 2 appeared to have gained 86 pounds in the eleven days just before its collapse; that No. 3 apparently gained 48 pounds in the seven days from September 2 to 9, and went "off" immediately after, and that No. 4, September 9, weighed 47 pounds more than it did six days before, although it could not have consumed in the meantime more than that amount of food. Some allowance must be made for the inaccuracy of gains computed from a difference in consecutive weights, and an error in weights is always possible; but the substantial agreement, in all cases, in a sudden and extreme increase of weight just before a collapse is, to say the least, surprising and difficult of explanation, especially in the case of No. 4, in which the material

appears to be wanting. The difficulty is not lessened by the fact that this occurred once, and once only, with each calf.

Uniformity of symptoms.—All agreed substantially in the essential symptoms resulting from deprivation of coarse food, namely, a ravenous appetite, followed by enlargement and stiffening of joints, spells of dizziness and difficult locomotion, all followed by periods of relief, and finally by a settled feeling of indifference to food. This indifference could be removed temporarily by any change of food, but permanently by coarse food only, which never failed to effect a restoration to normal conditions.

Starvation.—These experiments, considered in connection with common observation and experience, seem to teach that whether food be insufficient in quantity or imperfectly adapted in quality to the needs of the animal, the result is the same—defective nutrition, which is in no sense different from starvation.

It may be argued that depriving milk of its fat violated a law of nature. The teaching has been, however, that the casein would be a full equivalent if in sufficient quantity, and the fact is clear that all these calves that were put on a diet of skimmed milk flourished remarkably well till at the age of four or five months.

However that may be, they all failed to sustain the demands of life on any diet until a ration of hay or straw was added, and then, as in the case of Nos. 2 and 3, made a rapid recovery. Further, from the first the attendant symptoms were those characteristic of slow starvation, namely, a ravenous appetite, soon giving place to a disturbance of the nerve centers, and later an entire indifference to food and a total loss of appetite.

As starvation in mature animals is accompanied by a wasting of the tissues, especially fat, so here starvation by imperfect nutrition during development resulted in the total absence of fat.

As bearing upon the more general principles of physiological requirements and body behavior, it may be said that these calves have exhibited phenomena notably similar to those of ill-fed children, as they have been studied by the writer in the tropics and observed to some extent in certain quarters of great cities. In hot countries a very little food will sustain life in a mature body, but the demands of growing children are more exacting, and they may be seen by hundreds tucked away in obscure corners, with face in hands, exhibiting that characteristic expression that may be called the starved look and that is easily detected in human being or in animal wherever present.

There is a popular belief that starvation in all its stages is an acute and painful condition incident only upon insufficient amounts of food. There could be no greater error. The acute stage soon passes and there is only a nameless and dull yearning left till life is extinct. These experiments appear to teach that starvation, partial or complete, may ensue upon an apparently slight interference with constitutional habit.

MOVEMENT OF FARM ANIMALS.

The table on page 208 shows a summary of the receipts and shipments of farm animals for the year of 1896 at thirty of the principal stock centers of the United States. The succeeding tables show the receipts and shipments in detail for these stock centers and cover a varying number of years. The figures for the larger points are accurate, while many of those given for the smaller points are estimated from reports of stock-yard officials and railway officials.

A table showing in brief form the total receipts and shipments, so far as they are obtainable, is given herewith:

Total receipts and shipments of farm animals for 1896.

Animal.	Receipts.	Shipments.
Cattle	9,081,070	5,059,131
Calves	515,813	129,347
Hogs	28,589,253	10,813,694
Sheep	13,903,856	5,655,365
Horses and mules	437,110	411,144
Total	50,527,202	22,068,681

The total movement of cattle, sheep, or hogs does not indicate the exact number that was marketed. The receipts and shipments at Denver may appear later in the receipts and shipments at Kansas City, and still later in the receipts and shipments at Chicago. So it will be observed that there must certainly be many duplications and some triplications.

As this is the first time that statistics of this character have appeared in these reports, an effort is made to have them as complete as possible for years previous to 1896. At Chicago, for instance, animal statistics are given since 1866 and monthly reports since 1888. The reports for Kansas City go back to 1871.

RECEIPTS AND SHIPMENTS FOR 1896.

Table showing the receipts and shipments of live stock at the principal stock centers for the year 1896.

Stock center.	Cattle.		Calves.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
Chicago.....	2,600,476	818,326	138,337	6,457	7,686,472	1,896,312	3,560,655	561,239	106,978	98,445
Kansas City (Kans.).....	1,714,532	1,714,336	100,166	100,284	2,605,575	2,604,842	988,128	989,420	57,847	57,710
Omaha.....	570,515	286,421			1,197,688	78,780	353,332	131,454	9,663	5,000
St. Paul.....	92,062	73,994	5,750	4,647	816,786	75,472	202,415	161,468		
St. Louis.....	142,238	90,616			297,451	84,940	10,425	6,153	146	42
St. Louis (Mo.).....	97,336	8,903			382,727	76,948	53,788	5,276	15,776	3,959
St. Louis (St. Clair County, Ill.).....	792,062	313,554			1,618,060	988,376	591,063	273,152	92,921	79,039
Indianapolis.....	135,253	63,369			1,265,405	523,421	120,890	79,599	22,546	17,402
St. Joseph.....	39,017	39,006			198,298	192,960	24,169	24,169	3,403	3,403
Milwaukee.....	39,455	16,412	29,259	3,491	301,629	30,687	52,104	21,227	1,379	382
Pittsburg.....	248,452	169,631	35,225	5,589	1,339,831	871,195	815,389	353,295	13,767	36,994
Buffalo.....	945,274	766,440			3,900,450	2,139,000	2,064,200	1,889,000	89,100	84,880
Lincoln.....	15,073	14,815			52,391	1,591	20,555	17,879	1,491	1,491
Cincinnati.....	172,809	88,878	43,808	659	877,177	391,377	481,255	383,718	2,062	1,524
Cleveland.....	10,586				494,908	182,417	98,662			
Boston.....	166,134	165,754					127,106	120,485	5,470	
Philadelphia.....	121,475	23,034			278,497	3,945	468,618	52,255		7,297
Baltimore.....	148,482	104,446	15,498	2,869	894,793	176,345	363,638	238,220	8,969	7,880
Louisville.....	96,510	40,854	11,066	1,000	766,668	487,713	243,817	203,817	1,394	1,172
Detroit.....	54,912	21,128	13,292	4,361	223,708	20,620	125,791	50,576		
Jersey City.....	147,634		84,635		678,080		1,227,856			
Richmond.....	22,462				34,578		16,385			
Charleston.....	8,100				15,000		400			
Newport News.....		18,942						2,587		
Denver.....	202,013	202,073			56,537	56,537	180,639	180,639	2,537	2,537
Pueblo.....	58,980	58,925			11,602	11,602	67,902	67,902	792	782
Fort Worth.....	63,725	50,974			141,480	18,594	3,744	1,945	1,869	1,765
San Francisco.....	96,963				162,277		142,656			
New York.....	269,814		200,093		886,632		721,734			
Weehawken.....	17,377		38,709		99,827		186,673			
Total.....	9,081,070	5,069,121	515,813	129,847	26,589,353	10,813,094	12,903,856	5,655,865	437,110	411,144

CHICAGO.

Table showing the receipts and shipments of live stock at the Union Stock Yards, Chicago, Ill., for the years 1886 to 1896, inclusive.

Year and month.	Cattle.		Calves.		Hogs.		Sheep.		Horses.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1886.....	383,007	293,693	.....	.....	981,746	482,875	397,987	75,447	1,563	162
1887.....	329,188	303,580	.....	.....	1,606,738	758,789	190,888	50,275	847	387
1888.....	324,524	315,967	.....	.....	1,706,782	1,020,329	270,801	1,902	1,902	2,185
1889.....	408,102	394,717	.....	.....	1,681,889	1,066,305	340,072	108,680	1,524	1,538
1890.....	532,964	361,709	.....	.....	1,683,158	924,453	349,883	116,711	8,587	3,488
1891.....	543,060	401,827	.....	.....	2,380,083	1,162,286	315,053	135,064	5,963	5,462
1892.....	694,075	510,025	.....	.....	3,282,623	1,895,594	310,211	145,016	12,145	10,625
1893.....	761,428	574,181	.....	.....	4,437,750	2,197,557	291,734	115,235	20,289	18,540
1894.....	843,966	682,689	.....	.....	4,258,379	2,330,381	333,655	180,555	17,588	16,078
1895.....	920,843	698,534	.....	.....	3,912,110	1,882,643	418,948	248,604	11,346	11,129
1896.....	1,096,745	797,724	.....	.....	4,190,006	1,131,635	364,085	185,925	8,159	6,889
1897.....	1,083,151	703,402	.....	.....	4,025,970	951,221	310,240	155,354	7,874	6,598
1898.....	1,083,088	669,108	.....	.....	6,380,654	1,296,906	310,430	156,727	9,415	8,178
1899.....	1,215,732	728,903	.....	.....	6,448,380	1,962,361	325,119	159,266	10,473	9,289
1900.....	1,882,477	886,614	.....	.....	7,056,355	1,394,960	335,810	156,510	10,398	8,713
1901.....	1,498,550	888,712	48,948	38,485	6,474,844	1,289,679	498,624	253,938	12,909	11,108
1902.....	1,582,530	921,009	24,965	10,229	5,877,504	1,747,722	628,867	314,200	13,866	12,788
1903.....	1,876,944	968,758	30,223	12,671	5,640,625	1,319,362	749,917	374,463	15,255	14,698
1904.....	1,817,697	791,884	52,353	31,089	5,351,967	1,362,615	801,630	290,352	18,602	18,247
1905.....	1,905,518	744,068	58,500	33,610	6,987,535	1,797,448	1,008,598	290,277	19,366	18,582
1906.....	1,963,900	704,675	51,280	18,657	6,718,781	2,060,784	1,006,790	296,012	27,569	26,868
1897.....	2,382,008	791,453	65,889	15,966	5,470,832	1,812,001	1,260,882	445,094	46,404	46,155
Total.....	24,576,467	13,951,647	392,138	135,677	98,436,641	31,267,944	10,712,284	4,281,289	276,994	247,725
1898.....	223,851	86,995	2,771	1,320	594,734	197,004	111,431	34,894	3,480	3,861
January.....	166,336	67,822	3,082	459	426,086	153,790	92,715	21,123	5,323	5,212
February.....	182,406	72,471	815	815	416,307	181,213	106,333	22,900	5,064	5,561
March.....	182,015	73,228	6,880	688	380,728	164,619	110,453	40,128	5,159	5,099
April.....										

CHICAGO—Continued.

Table showing the receipts and shipments of live stock at the Union Stock Yards, Chicago, Ill., for the years 1886 to 1896, inclusive—Cont'd.

Year and month.	Cattle.		Calves.		Hogs.		Sheep.		Horses.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1889.										
May.....	204,919	81,737	6,965	220	482,770	167,407	138,750	52,855	6,591	6,290
June.....	201,647	69,916	11,711	1,574	451,182	152,928	112,972	53,714	5,531	5,250
July.....	205,814	72,216	11,730	3,084	331,879	170,261	98,740	35,610	4,460	4,159
August.....	222,040	81,412	12,559	3,622	267,715	129,501	142,640	61,923	4,822	4,467
September.....	259,738	95,163	13,798	4,401	293,438	128,036	138,735	60,898	4,147	3,994
October.....	281,156	99,297	9,731	2,597	384,842	123,456	187,450	95,500	4,068	3,662
November.....	259,780	85,180	7,426	2,466	482,442	90,917	144,956	59,032	2,768	2,703
December.....	211,861	82,938	5,496	2,317	447,075	92,069	136,833	62,704	3,267	3,128
Total.....	2,611,543	908,866	96,086	23,663	4,621,712	1,761,820	1,515,014	601,241	55,833	52,866
1890.										
January.....	238,412	97,615	8,470	1,269	483,887	126,865	154,316	62,545	4,126	3,868
February.....	207,778	98,643	3,251	1,355	559,439	189,854	136,313	46,309	6,916	6,390
March.....	191,738	101,047	4,487	349	429,550	158,608	129,073	47,452	9,884	8,968
April.....	233,574	111,511	6,698	1,08	368,192	142,751	131,041	33,248	7,750	7,280
May.....	247,887	114,741	7,975	176	496,250	154,432	121,740	31,213	8,181	7,361
June.....	220,832	94,900	15,276	2,048	515,653	131,697	130,074	41,396	8,863	8,663
July.....	272,541	104,863	15,256	4,384	414,686	147,379	133,744	42,680	6,070	5,623
August.....	297,276	119,423	19,007	5,001	357,626	144,619	174,368	76,138	5,272	4,987
September.....	276,419	104,329	18,555	7,538	421,394	168,577	189,641	81,967	7,478	6,949
October.....	380,994	111,771	13,402	5,365	691,771	197,427	227,316	117,621	6,166	5,720
November.....	261,850	95,091	9,419	4,245	698,005	115,089	144,832	64,262	5,442	5,067
December.....	249,066	106,086	6,174	2,540	692,181	110,491	187,963	96,594	4,255	4,281
Total.....	3,023,281	1,259,971	122,968	35,676	5,998,539	1,796,659	1,822,499	711,315	79,926	73,311
1890.										
January.....	288,898	124,315	6,278	2,068	807,798	141,746	188,973	68,982	6,261	5,635
February.....	232,796	112,645	6,068	1,469	563,836	224,964	153,433	68,747	9,498	8,572

March.....	346,523	119,221	6,383	708	594,090	211,023	171,465	76,474	19,937	12,865
April.....	250,747	131,249	11,131	1,063	467,509	143,151	191,200	84,030	11,459	10,495
May.....	290,000	109,838	9,767	683	537,977	121,903	172,832	59,554	11,027	10,011
June.....	234,037	89,946	19,000	5,476	601,076	129,541	181,496	85,401	9,020	7,350
July.....	238,200	104,016	23,425	7,437	612,355	128,012	143,958	40,620	7,524	6,803
August.....	294,433	101,234	21,939	10,539	574,207	157,023	185,174	99,902	8,081	7,451
September.....	322,706	100,234	24,902	11,628	518,337	191,797	218,754	104,572	8,061	7,366
October.....	332,068	108,195	21,535	11,019	746,844	214,370	219,107	96,675	7,064	6,402
November.....	263,511	74,432	13,125	5,521	378,922	154,238	163,161	63,891	6,019	5,893
December.....	377,614	87,944	8,631	3,824	622,221	136,325	195,644	81,416	4,025	4,339
Total.....	3,454,290	1,220,309	175,025	61,460	7,663,826	1,985,710	2,132,607	929,854	101,566	94,382
1891.										
January.....	374,369	98,046	7,490	3,944	1,068,260	232,048	305,132	98,420	8,018	7,379
February.....	293,413	87,980	6,012	2,369	933,873	328,463	175,217	65,866	12,196	12,007
March.....	342,816	96,268	8,366	966	861,632	360,968	205,813	80,813	11,917	10,760
April.....	301,668	70,031	10,402	524	523,525	232,548	208,624	91,136	10,153	9,626
May.....	360,663	76,756	13,440	394	560,115	273,269	166,861	67,507	9,871	8,747
June.....	235,618	67,943	26,753	5,906	571,421	254,264	167,031	53,239	6,988	6,534
July.....	326,968	83,454	28,363	5,699	498,497	337,112	169,768	44,909	6,213	4,700
August.....	290,705	88,162	23,357	4,893	394,469	173,266	160,349	43,798	5,605	4,865
September.....	308,223	114,430	31,868	8,317	450,584	200,077	187,645	47,063	7,168	6,494
October.....	373,338	109,936	23,127	7,205	664,949	217,652	191,473	45,654	8,061	7,424
November.....	290,266	86,280	16,971	5,368	1,008,865	174,821	140,569	26,770	5,209	4,794
December.....	251,257	82,936	7,776	2,969	1,068,262	199,869	155,723	34,512	4,062	3,853
Total.....	3,250,359	1,066,264	205,351	48,331	8,600,805	2,992,514	2,153,537	698,205	94,399	87,273
1892.										
January.....	296,633	102,449	7,824	2,369	977,384	305,002	156,861	21,400	6,388	5,362
February.....	267,013	107,371	9,076	1,464	675,568	333,229	168,235	44,320	9,920	8,472
March.....	271,165	107,191	9,360	365	632,594	315,066	187,161	52,134	10,522	9,582
April.....	245,537	101,088	12,624	2,065	557,931	239,517	178,435	50,817	9,744	8,749
May.....	264,849	90,566	14,624	1,608	737,259	249,728	194,262	48,640	8,669	7,346
June.....	295,717	75,045	20,701	1,850	701,982	231,035	101,498	54,077	7,231	5,867
July.....	305,315	83,531	26,322	5,011	488,820	235,963	138,942	41,195	4,369	4,046
August.....	318,551	82,435	22,874	1,907	515,741	165,550	183,599	27,740	6,165	4,955
September.....	385,498	103,513	26,062	4,778	568,738	210,103	190,928	37,361	7,529	6,139

CHICAGO—Continued.

Table showing the receipts and shipments of live stock at the Union Stock Yards, Chicago, Ill., for the years 1886 to 1896, inclusive—Cont'd.

Year and month.	Cattle.		Calves.		Hogs.		Sheep.		Horses.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1893.										
October.....	345,220	91,712	28,905	4,210	547,498	240,116	200,198	40,114	7,372	5,515
November.....	328,950	83,356	14,744	2,659	646,313	211,343	178,968	37,408	4,596	4,169
December.....	289,320	93,418	12,053	2,718	694,639	218,334	157,967	28,119	4,516	4,196
Total.....	3,571,766	1,121,675	197,576	31,004	7,714,425	2,926,145	2,145,079	483,368	86,998	74,388
1894.										
January.....	281,244	83,101	14,660	2,184	595,312	210,171	200,873	29,555	7,059	5,611
February.....	242,575	77,640	8,979	1,214	386,477	202,552	221,945	36,471	9,519	7,712
March.....	244,519	79,678	8,961	247	408,778	188,315	225,169	34,352	12,865	11,467
April.....	228,760	67,896	11,766	232	411,182	182,991	240,783	31,107	11,605	9,351
May.....	248,813	73,726	17,246	308	463,897	153,813	262,847	57,147	10,115	8,215
June.....	245,974	76,231	24,060	1,520	516,148	140,288	281,169	44,369	6,927	5,941
July.....	285,742	75,662	23,897	1,796	519,507	151,063	278,555	27,147	3,766	3,506
August.....	269,224	68,190	22,911	1,017	509,929	162,244	230,136	32,639	3,346	2,918
September.....	283,867	78,227	23,900	1,551	548,871	183,863	268,266	35,011	4,173	3,433
October.....	328,944	86,605	26,727	1,480	504,746	203,358	326,086	59,736	5,661	4,786
November.....	270,367	65,518	15,297	1,309	557,397	178,299	258,966	34,322	3,696	3,495
December.....	225,367	67,789	12,623	994	628,034	202,498	226,427	22,009	3,770	3,566
Total.....	3,138,406	900,183	210,357	13,832	6,067,278	2,149,410	3,031,174	442,865	82,492	70,011
1894.										
January.....	254,658	81,168	6,302	604	797,381	232,865	297,722	14,961	7,685	6,191
February.....	214,462	76,731	5,015	441	537,478	219,681	249,521	19,787	9,109	8,424
March.....	223,005	83,185	6,558	283	625,055	241,079	240,632	16,690	13,690	13,163
April.....	256,620	85,899	14,758	275	599,996	223,067	251,779	26,765	10,612	9,868
May.....	238,413	77,281	20,289	297	573,187	227,006	259,103	30,062	9,963	9,015
June.....	218,772	66,218	17,566	339	602,565	199,049	200,107	26,104	5,969	5,802
July.....	158,664	40,265	12,670	686	370,468	134,960	184,301	7,556	2,679	2,331
August.....	237,862	97,389	21,186	1,683	694,871	233,488	240,872	16,184	6,838	6,373

September.....	283,886	66,842	19,129	1,666	411,915	179,069	267,409	20,832	7,677	6,760
October.....	843,380	97,319	17,462	1,881	629,979	196,525	372,293	72,468	9,834	9,283
November.....	279,880	82,234	12,400	2,161	338,806	234,076	297,045	34,050	6,864	6,602
December.....	215,825	67,817	7,564	1,563	785,082	173,553	279,971	36,373	6,845	6,664
Total.....	2,974,863	860,738	180,949	11,888	7,483,228	2,465,068	3,089,725	333,398	97,415	90,441
1895.										
January.....	234,971	71,662	9,863	1,743	878,115	235,068	254,111	20,824	10,698	10,424
February.....	170,700	57,888	7,101	357	786,686	238,735	245,604	20,457	9,954	9,738
March.....	168,381	59,180	12,014	175	715,495	298,580	230,308	43,969	16,791	16,009
April.....	161,084	52,611	22,369	297	486,326	213,215	289,341	55,648	13,612	12,003
May.....	187,233	51,380	20,066	1,165	674,864	190,887	261,710	18,007	12,830	12,162
June.....	167,859	41,785	21,068	612	566,409	131,651	246,541	26,419	7,081	7,277
July.....	225,559	60,853	22,272	738	382,396	157,723	278,898	11,777	6,108	5,913
August.....	245,636	80,860	16,272	861	379,229	131,200	317,975	45,665	6,564	6,762
September.....	270,795	82,858	10,892	821	446,284	131,074	339,242	45,846	8,598	7,382
October.....	309,061	98,878	12,082	1,608	869,941	205,869	368,820	93,366	9,280	8,890
November.....	221,907	66,230	7,903	659	937,479	144,732	296,171	35,967	6,725	7,161
December.....	225,372	66,204	6,968	946	780,906	112,969	263,018	30,651	5,112	4,855
Total.....	2,598,558	785,082	168,740	9,822	7,885,283	2,100,613	3,406,739	477,648	113,163	109,146
1896.										
January.....	237,763	73,852	8,865	1,112	707,692	150,227	293,903	24,294	10,089	9,632
February.....	182,497	72,860	6,419	324	561,327	185,246	239,622	38,227	12,811	12,189
March.....	203,043	71,892	12,994	186	596,165	182,612	291,419	43,866	14,639	13,906
April.....	187,635	65,861	18,470	198	608,674	142,083	298,235	55,498	14,566	14,038
May.....	205,080	60,682	20,774	488	690,113	147,389	301,824	46,382	11,222	10,240
June.....	208,946	57,178	17,672	224	704,965	169,745	298,353	26,994	7,602	6,894
July.....	224,949	65,539	12,710	383	498,944	162,825	279,130	26,636	4,124	3,970
August.....	241,100	71,108	9,190	651	486,674	154,822	255,751	37,280	6,251	5,399
September.....	248,244	80,452	10,220	925	664,065	183,701	377,058	84,349	7,577	6,459
October.....	226,251	71,223	7,146	585	777,622	149,514	378,300	94,082	6,080	5,992
November.....	210,540	57,575	7,506	877	590,557	150,438	290,228	52,695	5,521	4,594
December.....	214,476	70,109	6,399	499	788,704	107,605	236,419	31,046	5,456	5,192
Total.....	2,600,476	818,286	138,337	6,457	7,659,472	1,896,312	3,594,655	561,239	105,978	98,445

KANSAS CITY.

Table showing the receipts and shipments of live stock at the Kansas City Stock Yards (Kansas City, Kans.) for the years 1871 to 1896, inclusive—Continued.

Year and month.	Cattle.		Calves.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.
1871.....	120,827	130,794	.....	.....	41,088	40,102	4,527	4,527	809	809
1872.....	238,802	286,790	.....	.....	104,689	104,869	6,071	6,071	2,948	2,948
1873.....	227,989	227,668	.....	.....	221,815	220,574	5,975	5,951	4,202	4,202
1874.....	207,069	207,069	.....	.....	212,532	212,714	8,865	8,877	3,679	3,685
1875.....	174,754	174,211	.....	.....	63,350	63,060	25,327	25,310	2,648	2,635
1876.....	183,378	183,256	.....	.....	163,777	163,190	55,045	54,829	5,339	5,321
1877.....	215,768	215,771	.....	.....	192,645	193,204	42,190	42,333	4,279	4,296
1878.....	175,944	175,549	.....	.....	427,777	429,355	38,700	37,012	10,768	10,794
1879.....	211,415	211,361	.....	.....	588,908	589,794	61,684	61,157	15,329	15,826
1880.....	244,709	244,281	.....	.....	676,477	676,848	80,611	81,004	14,066	14,060
1881.....	288,963	288,134	.....	.....	1,014,804	1,015,447	79,924	79,848	12,598	12,604
1882.....	436,671	436,521	.....	.....	903,086	901,906	80,724	80,708	11,716	11,607
1883.....	460,780	460,568	.....	.....	1,379,401	1,379,006	119,665	119,180	19,860	19,809
1884.....	535,626	535,962	.....	.....	1,723,586	1,724,287	237,984	237,214	27,163	27,092
1885.....	508,627	508,577	.....	.....	2,358,718	2,359,087	221,801	223,088	24,576	24,656
1886.....	490,971	490,908	.....	.....	2,264,424	2,264,823	172,659	172,397	33,188	33,068
1887.....	690,324	690,082	.....	.....	2,423,228	2,423,546	209,656	209,491	29,860	29,613
1888.....	1,055,696	1,055,547	.....	.....	2,008,964	2,009,250	381,080	381,796	27,060	27,739
Total.....	6,440,514	6,439,094	.....	.....	16,818,731	16,817,057	1,770,728	1,770,793	250,678	250,586
1890.										
January.....	78,627	77,676	.....	.....	168,989	168,866	38,068	38,776	2,848	1,748
February.....	72,964	73,833	.....	.....	179,238	177,431	31,088	29,658	2,746	2,245
March.....	46,066	46,398	.....	.....	176,061	176,861	26,896	25,447	3,816	3,715
April.....	72,004	71,544	.....	.....	161,708	162,520	33,640	32,871	2,461	2,005
May.....	69,824	69,147	.....	.....	223,503	221,065	30,342	31,242	2,202	2,029
June.....	70,332	70,632	.....	.....	234,005	230,610	25,620	25,114	2,040	2,790
July.....	114,320	113,837	.....	.....	146,748	150,161	10,822	10,065	2,084	2,525

August.....	126,831	126,709	.....	82,544	84,599	21,470	21,440	2,608	2,759
September.....	147,266	148,012	.....	100,870	109,123	31,547	31,003	2,081	2,080
October.....	171,015	169,160	.....	172,577	170,170	46,421	46,461	3,917	3,000
November.....	137,984	142,706	.....	191,090	191,334	45,217	44,572	3,230	3,304
December.....	93,682	94,901	.....	206,371	200,548	20,795	22,005	2,694	4,383
Total.....	1,290,343	1,219,385	.....	2,073,910	2,073,314	370,772	369,878	34,943	34,449
1890.									
January.....	107,153	106,822	1,180	200,780	200,402	39,432	37,254	4,503	3,689
February.....	95,388	94,593	1,047	139,502	129,254	40,222	41,711	4,205	4,010
March.....	99,003	100,905	1,195	151,768	151,541	43,998	42,394	2,981	3,823
April.....	119,669	118,083	1,105	999	178,047	54,008	56,399	2,970	2,094
May.....	126,293	124,773	1,739	1,647	252,185	76,891	73,769	2,599	2,115
June.....	98,122	97,183	11,513	11,394	238,983	48,748	48,246	2,744	2,710
July.....	136,377	139,229	13,512	13,221	347,480	39,953	38,311	3,000	3,381
August.....	135,690	141,136	14,023	14,007	296,255	302,014	36,517	2,762	2,645
September.....	194,195	149,047	12,551	12,374	224,382	224,278	51,518	8,283	3,599
October.....	181,795	182,135	9,755	10,446	287,500	285,908	47,173	3,266	2,840
November.....	125,345	130,792	6,897	6,899	298,100	301,189	39,495	2,981	3,194
December.....	95,690	97,372	2,111	2,694	250,279	251,482	24,828	2,805	3,099
Total.....	1,472,229	1,472,853	79,598	79,713	2,895,171	2,893,354	535,207	37,118	37,134
1891.									
January.....	79,142	45,335	702	131	316,879	57,554	20,940	2,178	2,518
February.....	66,316	38,402	821	23	230,779	37,653	14,119	1,119	2,080
March.....	60,367	32,379	800	281	189,271	43,192	8,746	2,018	2,389
April.....	59,087	33,701	720	149	203,999	94,516	7,397	1,319	1,596
May.....	67,053	38,494	1,985	1,063	201,181	78,737	39,007	1,006	1,216
June.....	75,120	39,074	10,139	5,379	196,529	41,201	11,154	1,282	1,497
July.....	117,220	69,984	12,152	7,398	136,219	47,518	21,891	1,234	1,101
August.....	169,198	79,965	16,863	10,094	99,390	27,549	14,839	1,195	1,555
September.....	183,715	117,613	12,624	6,215	141,729	29,880	17,865	2,544	2,621
October.....	186,912	112,091	10,390	4,409	270,401	67,534	20,550	4,008	3,000
November.....	134,066	82,533	6,768	3,411	310,496	24,140	14,832	2,062	2,323
December.....	93,402	52,662	1,457	499	263,483	25,544	9,117	1,752	1,692
Total.....	1,290,800	739,083	75,731	38,975	3,572,391	605,457	178,271	22,637	23,058

KANSAS CITY—Continued.
Table showing the receipts and shipments of live stock at the Kansas City Stock Yards (Kansas City, Kans.) for the years 1871 to 1896, inclusive—Continued.

Year and month.	Cattle.		Calves.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.
1893.										
January	98,585	98,978	977	997	285,282	282,917	24,764	24,527	1,701	1,542
February	76,168	75,778	1,063	943	190,872	191,753	38,984	38,071	1,914	1,794
March	78,444	78,402	1,102	1,228	174,813	173,717	41,538	41,134	2,467	2,523
April	81,184	82,220	1,059	1,086	198,386	200,378	52,294	52,490	1,736	1,769
May	75,357	74,278	1,447	1,290	248,238	243,631	50,729	50,369	2,419	2,557
June	75,187	73,892	9,108	9,043	244,121	246,830	42,477	41,487	2,075	2,043
July	122,541	121,130	16,703	16,332	167,385	166,738	17,941	18,884	2,138	2,212
August	167,318	164,508	19,849	19,249	150,185	152,112	32,963	31,657	3,002	2,904
September	200,798	194,479	16,282	17,434	129,235	128,045	31,169	32,542	4,807	4,496
October	198,582	200,252	13,028	13,010	204,294	205,347	39,843	39,305	4,081	4,325
November	180,041	180,336	8,121	8,186	199,979	196,647	42,006	38,697	3,231	3,398
December	116,933	120,663	3,263	3,300	204,719	200,484	23,571	27,976	2,932	2,968
Total	1,479,078	1,477,741	92,077	92,156	2,397,477	2,386,757	438,398	438,139	32,505	32,432
1893.										
January	111,313	108,375	1,525	1,549	193,258	191,475	30,493	30,382	4,021	3,616
February	96,338	99,930	1,476	1,402	135,881	137,405	46,323	46,007	4,349	4,068
March	97,869	97,522	1,478	1,406	147,418	146,581	53,113	52,231	4,258	4,083
April	102,698	103,790	1,872	1,365	177,380	177,223	63,416	62,761	2,759	3,148
May	110,979	110,297	1,940	1,805	198,873	198,287	60,266	68,718	2,583	2,398
June	121,411	111,635	7,352	6,912	166,375	166,642	51,156	52,331	2,890	2,729
July	131,898	134,916	12,076	12,270	173,637	174,358	50,490	50,708	2,739	2,937
August	158,795	155,444	16,008	15,951	157,239	168,597	38,765	31,407	1,946	1,109
September	188,647	189,291	14,494	14,906	157,198	158,080	28,581	27,482	2,107	2,291
October	226,848	223,890	16,531	15,742	127,498	128,680	51,078	50,768	2,830	2,416
November	187,443	188,128	7,405	7,843	123,393	124,042	51,085	52,277	3,127	3,025
December	133,172	140,050	4,764	4,545	160,223	160,548	42,751	43,907	2,439	2,701
Total	1,690,807	1,691,247	98,021	85,908	1,948,473	1,948,437	569,617	569,277	35,467	34,891

1894.

January	147,482	141,295	2,226	2,301	223,894	41,653	40,519	3,900	3,714
February	109,596	112,159	1,377	1,142	184,479	38,947	39,218	3,764	3,610
March	119,667	122,157	2,064	2,023	237,106	47,126	47,661	4,163	4,251
April	110,538	109,560	2,198	2,874	216,394	64,335	64,536	2,720	2,834
May	100,018	100,606	1,947	1,775	247,778	44,203	40,903	3,179	2,969
June	91,856	82,744	5,412	5,466	220,081	35,731	38,817	2,605	2,979
July	135,011	132,775	11,701	10,920	169,570	31,184	29,521	1,773	1,847
August	200,663	196,288	16,421	16,618	224,308	40,642	42,189	4,077	3,852
September	161,460	163,643	13,482	14,075	141,197	63,046	62,183	4,906	5,072
October	222,733	220,463	14,408	13,843	188,063	68,912	69,900	4,908	4,856
November	170,008	170,705	8,176	9,082	274,856	69,061	70,040	4,170	4,197
December	120,081	124,879	3,960	3,547	217,216	44,295	46,872	3,842	3,972
Total	1,689,193	1,667,274	83,352	83,256	2,547,077	589,555	589,359	44,237	44,151

1895.

January	119,276	46,653	3,124	1,235	274,315	59,421	22,802	2,688	2,837
February	90,394	30,523	2,213	894	30,996	61,723	27,402	2,154	2,296
March	114,238	51,517	3,290	1,210	185,955	63,046	21,529	2,667	2,337
April	95,099	44,628	2,189	829	39,708	98,455	33,974	1,726	1,653
May	112,806	41,353	2,679	1,036	299,458	98,989	27,915	1,293	1,299
June	95,005	36,844	4,866	1,637	194,660	66,849	21,300	775	848
July	125,928	54,102	8,317	2,435	125,338	47,359	7,696	812	963
August	170,057	89,363	16,968	8,408	119,150	67,230	21,736	1,456	1,163
September	175,990	84,035	13,275	5,387	110,507	82,749	29,263	2,314	1,853
October	215,111	108,311	9,560	3,122	228,772	10,717	43,138	4,769	4,655
November	144,295	73,130	3,270	1,320	248,074	60,422	27,825	4,143	4,527
December	127,248	64,217	2,257	915	245,771	5,782	10,597	5,003	4,663
Total	1,598,445	719,704	71,980	28,368	2,420,570	847,901	287,294	29,833	29,214

1896.

January	123,103	121,934	2,401	2,395	292,164	52,896	53,594	11,939	11,741
February	104,944	105,914	1,748	1,763	183,519	73,499	70,116	9,265	9,147
March	105,928	104,354	3,598	3,621	187,688	95,191	90,615	6,312	6,019
April	90,742	92,851	2,345	1,941	252,887	113,215	118,136	2,928	3,259
May	105,542	105,126	2,270	2,406	299,743	99,600	100,956	3,143	3,061

KANSAS CITY—Continued.

Table showing the receipts and shipments of live stock at the *Kansas City Stock Yards (Kansas City, Kans.) for the years 1871 to 1896, inclusive—Continued.*

Year and month.	Cattle.		Calves.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
June	108,782	106,916	8,968	8,764	267,389	288,985	72,189	70,643	1,338	1,451
July	127,922	127,563	18,786	14,038	172,915	174,032	59,211	61,249	1,400	1,364
August	157,687	156,806	14,741	14,705	136,361	136,661	53,708	52,331	1,965	1,885
September	229,945	223,230	16,909	15,523	168,874	158,254	109,960	107,272	3,703	3,701
October	212,180	221,406	12,262	12,982	212,849	213,772	88,911	90,725	5,215	5,324
November	181,233	176,329	10,076	10,065	103,420	102,581	98,825	99,198	5,397	5,240
December	168,516	171,007	11,733	12,101	307,551	307,450	75,931	71,565	5,392	5,518
Total	1,714,532	1,714,338	100,166	100,394	2,605,575	2,604,642	988,126	989,420	57,847	57,710

PUEBLO.

Table showing receipts and shipments of live stock by the *Pueblo (Colo.) Union Stock Yard Company for the years 1889 to 1896, inclusive.*

Year.	Cattle.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1889	23,480	23,480	231	231	54,101	54,101	878	878
1890	77,691	77,691	1,725	1,725	81,563	81,563	3,135	3,135
1891	80,973	80,973	1,842	1,842	23,085	23,085	2,046	2,046
1892	121,675	121,675	1,563	1,563	57,966	57,966	3,212	3,212
1893	78,442	78,442	2,792	2,792	32,921	32,921	1,601	1,601
1894	44,509	44,509	5,086	5,086	10,977	10,977	1,430	1,430
1895	89,309	89,183	5,421	5,421	19,565	19,565	717	717
1896	58,930	58,925	11,902	11,902	67,902	67,902	782	782
Total	574,909	574,878	30,994	30,994	348,170	348,170	13,801	13,801

CLEVELAND.

Table showing the receipts and shipments of live stock at the Cleveland (Ohio) Stock Yards for the years 1895 and 1896.

Year and month.	Cattle.		Hogs.		Sheep.		Year and month.	Cattle.		Hogs.		Sheep.	
	Re- ceipts.	Ship- ments.	Re- ceipts.	Ship- ments.	Re- ceipts.	Ship- ments.		Re- ceipts.	Ship- ments.	Re- ceipts.	Ship- ments.	Re- ceipts.	Ship- ments.
1895.							1896.						
January	708		27,236	6,677	6,621		January	1,339		48,410	13,306	8,975	
February	358		16,166	5,250	6,494		February	798		21,432	8,694	8,836	
March	638		23,960	9,820	5,939		March	1,226		22,268	8,459	7,194	
April	522		13,822	5,938	4,685		April	885		32,600	7,110	6,192	
May	397		27,059	6,444	7,444		May	1,181		42,229	8,139	6,556	
June	461		28,475	5,545	6,545		June	609		34,835	11,378	9,262	
July	678		11,534	3,588	11,534		July	814		19,616	6,308	10,348	
August	808		13,994	2,613	10,440		August	391		24,621	8,957	10,074	
September	163		25,160	10,581	10,479		September	381		26,836	10,180	7,721	
October	452		29,818	10,368	10,415		October	590		42,863	12,141	6,453	
November	408		46,295	14,215	8,703		November	990		48,717	11,451	5,289	
December	935		57,103	20,495	7,189		December	1,391		72,423	21,900	6,801	
Total	6,649		322,612	101,042	96,498		Total	10,596		434,806	132,417	98,662	

OMAHA.

Table showing the receipts and shipments of live stock at the Union Stock Yards, Omaha, Nebr., for the years 1884 to 1896, inclusive.

Year and month.	Cattle.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1884.....	86,888	81,955	1,863	500	4,188	1,273	466	419
1885.....	114,163	83,233	130,867	71,919	19,965	8,408	1,959	1,417
1886.....	144,457	73,120	300,487	187,360	40,195	17,728	3,028	1,855
1887.....	225,723	151,419	1,011,706	140,726	76,014	56,444	3,272	1,854
1888.....	340,469	206,094	1,283,600	363,228	158,503	118,208	5,095	3,797
1889.....	467,340	227,921	1,206,605	170,916	159,053	103,250	7,595	6,746
1890.....	608,669	283,880	1,673,314	275,638	156,186	94,464	5,318	4,935
1891.....	563,044	297,730	1,462,427	245,046	170,849	89,416	8,592	7,885
1892.....	738,198	282,082	1,705,687	381,723	185,457	83,445	14,183	12,146
1893.....	852,642	309,776	1,435,271	383,116	242,581	91,814	12,269	9,176
1894.....	829,171	311,627	1,904,238	400,640	252,218	115,764	8,122	6,085
Total.....	5,008,792	2,278,817	12,206,081	2,579,821	1,464,229	780,214	69,739	56,325
1895.								
January.....	59,049	30,551	133,652	11,610	14,959	5,564	386	158
February.....	50,718	21,438	155,649	12,496	12,741	4,471	422	258
March.....	32,305	11,361	121,343	13,950	12,554	8,369	298	175
April.....	40,730	21,662	98,875	11,626	21,658	12,713	371	127
May.....	33,469	16,186	87,064	7,226	27,107	21,531	417	89
June.....	28,783	10,942	115,678	7,018	9,415	530	364	285
July.....	21,356	7,591	87,029	2,741	14,302	5,947	463	445
August.....	40,384	15,875	59,367	12,566	7,372	1,069	677	683
September.....	78,380	43,432	46,895	7,342	12,008	5,723	845	683
October.....	75,228	40,040	49,201	2,306	28,947	24,287	748	691
November.....	88,900	40,456	100,707	8,020	25,466	16,311	1,170	1,014
December.....	54,830	28,376	104,094	8,870	14,104	7,258	630	554
Total.....	602,232	287,910	1,188,421	100,871	296,638	113,798	6,789	5,176

1896.									
January	42,800	17,268	131,967	9,411	11,106	4,388	674	572	
February	40,183	15,673	97,367	4,239	12,648	1,492	720	356	
March	83,308	12,571	79,772	2,312	13,248	4,156	994	427	
April	37,312	15,421	85,697	4,194	17,864	7,440	976	402	
May	33,325	18,728	83,654	4,352	30,114	7,802	766	237	
June	37,590	9,672	121,376	4,517	60,450	37,489	733	272	
July	36,170	8,661	153,232	8,368	15,867	1,508	987	369	
August	40,526	16,641	96,878	8,506	21,410	5,390	803	515	
September	56,911	28,008	80,662	11,342	28,808	7,886	274	141	
October	73,058	34,532	95,057	12,442	53,272	24,119	943	397	
November	86,730	42,153	96,186	7,066	45,422	30,563	1,027	702	
December	52,462	20,824	76,800	2,112	32,793	9,342	756	610	
Total	570,515	235,421	1,197,688	73,790	353,352	131,454	9,653	5,000	

SAN FRANCISCO.

Table showing the receipts of live stock at San Francisco, Cal., for the years 1895 and 1896.

Year and month.		Cattle.	Calves.	Hogs.	Sheep.
1895.					
January	3,357		6,457	10,994	
February	1,415		4,707	7,126	
March	1,904		2,533	5,636	
April	2,007		4,656	7,797	
May	1,868		4,722	9,832	
June	1,382		3,194	10,080	
July	2,159		3,796	9,364	
August	1,449		5,896	11,875	
September	1,709		5,031	9,548	
October	2,714		7,908	12,136	
November	1,775		4,162	11,072	
December	1,753	284	19,677	9,104	
Total	23,532	284	72,821	114,474	
1896.					
January	2,354	370	15,374		9,049
February	2,179	233	11,112		7,543
March	4,455	33	9,663		8,622
April	8,879	126	9,877		13,209
May	8,996	583			12,857
June	9,772	1,161	10,451		14,800
July	9,868	1,152	10,493		13,245
August	10,429	1,472	12,172		12,961
September	11,037	1,316	14,086		13,263
October	11,062	1,263	20,166		13,958
November	10,202	1,233	20,281		11,350
December	10,411	1,088	18,619		11,189
Total	98,893	10,030	162,277		142,656

ST. PAUL.

Table showing receipts and shipments of live stock at the St. Paul (Minn.) Stock Yards for the years 1888 to 1896, inclusive.

Year and month.	Cattle.		Calves.		Hogs.		Sheep.		Horses.	
	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.
1888.....	31,514	22,708	2,210	1,661	272,712	8,090	61,943	49,500	806	428
1889.....	64,546	43,442	4,114	1,896	249,000	21,465	121,564	102,971	2,853	2,375
1890.....	93,227	77,075	5,320	2,512	315,967	35,745	139,003	126,306	2,454	2,228
1891.....	136,983	124,216	5,654	2,747	233,479	22,328	80,423	81,838	1,864	1,668
1892.....	80,612	65,339	5,274	1,885	238,909	25,708	97,156	77,401	2,108	1,634
1893.....	109,644	95,713	8,966	1,406	194,062	6,256	153,314	115,277	896	725
Total.....	516,526	428,491	29,967	12,107	1,534,278	110,590	712,403	558,302	10,931	8,988
1894.										
January.....	4,505	3,003	213	37	25,608	531	3,117	5,890	22	22
February.....	4,845	3,431	218	47	13,454	1,068	1,468	16,175	3	.....
March.....	3,197	3,049	145	86	18,261	505	2,660	8,236	4	4
April.....	4,229	3,143	320	48	26,638	287	11,184	6,618	14	7
May.....	4,836	4,009	334	82	29,965	206	1,665	3,963	19	23
June.....	2,303	2,555	448	89	23,198	38	3,434	2,177	36	5
July.....	862	1,768	178	52	13,061	76	3,140	1,497	44	43
August.....	6,460	5,774	498	186	22,066	234	7,455	8,951	63	88
September.....	14,157	12,542	245	10	20,310	367	9,142	4,170	4	8
October.....	15,683	14,715	275	32	31,476	1,136	15,242	12,342	61	43
November.....	9,829	8,463	226	48	57,067	3,439	25,234	8,880	79	83
December.....	4,447	4,002	276	103	39,534	620	11,347	2,790	23	18
Total.....	74,833	67,184	3,312	799	326,663	8,538	98,142	76,659	866	234
1895.										
January.....	7,000	3,673	214	98	38,304	360	8,746	6,350	4	4
February.....	3,386	2,350	157	47	31,411	198	4,768	12,405	.....	1
March.....	4,718	3,476	202	63	31,580	470	14,034	4,784	8	0
April.....	6,212	6,273	415	75	28,440	867	4,057	11,690	30	22

May.....	5,373	4,104	469	79	39,561	238	3,041	8,043	14	0
June.....	2,978	2,640	476	93	32,899	222	6,774	0,650	15	.....
July.....	5,592	0,313	474	63	18,399	3,185	7,273	0,394	13	18
August.....	9,174	7,770	490	63	8,759	1,881	10,977	7,827	3	8
September.....	12,294	11,300	498	71	9,791	1,697	15,605	11,564	21	21
October.....	14,974	12,818	501	216	35,085	6,074	40,020	19,005	19	19
November.....	8,957	7,665	243	28	51,261	10,788	46,549	24,169	3	.....
December.....	7,584	4,064	288	26	38,442	3,434	12,927	8,646	20	20
Total.....	89,540	72,585	4,529	1,045	394,455	29,439	174,868	125,136	140	116
1896.										
January.....	6,441	7,590	398	79	34,459	800	12,232	11,473	Statement of receipts by months could not be obtained. Statement of shipments by months could not be obtained.	
February.....	4,800	5,813	486	275	18,458	1,803	3,595	11,384		
March.....	4,757	3,381	580	660	21,246	814	8,704	9,754		
April.....	4,030	2,883	541	689	32,541	811	5,480	9,642		
May.....	3,440	2,181	596	537	38,015	279	8,125	7,284		
June.....	2,967	1,765	596	689	24,527	809	4,953	5,466		
July.....	4,068	4,111	497	186	19,450	1,610	4,970	8,074		
August.....	6,138	4,744	296	116	9,464	1,928	17,070	11,386		
September.....	13,532	11,968	548	285	13,084	3,650	24,081	18,081		
October.....	21,920	19,005	596	320	3,698	18,089	43,195	21,231		
November.....	10,523	9,195	293	240	37,100	22,113	43,395	23,011		
December.....	9,419	7,109	486	711	39,394	22,780	29,510	96,717		
Total.....	92,032	73,994	5,750	4,047	315,736	75,472	292,415	161,468	87	40

ST. LOUIS, ILL.

Table showing receipts and shipments of live stock at the St. Louis (St. Clair County, Ill.) National Stock Yards for the years 1874 to 1896, inclusive.

Year and month.	Cattle.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1874.....	224,002	176,402	498,840	365,431	41,407	28,316	2,235	2,163
1875.....	232,183	172,777	181,708	79,523	46,316	34,833	2,385	2,477
1876.....	234,671	178,069	333,560	139,920	84,034	63,408	2,616	2,246
1877.....	322,571	225,769	426,109	228,918	119,174	107,388	2,364	2,000
1878.....	317,880	230,777	833,446	422,975	82,549	67,291	3,534	1,960
1879.....	333,115	197,979	1,163,748	657,058	99,951	81,937	4,338	3,567
1880.....	346,533	218,719	1,262,234	832,410	129,611	109,553	5,963	4,869
1881.....	406,804	298,528	1,308,514	990,173	239,124	207,638	8,377	7,124
1882.....	356,494	234,827	643,871	390,675	303,753	260,167	14,284	11,814
1883.....	322,625	261,274	843,672	587,578	272,852	239,685	17,064	15,465
1884.....	380,569	304,894	1,079,827	602,251	277,678	237,346	14,703	13,340
1885.....	311,702	297,298	1,145,546	724,146	245,793	207,130	12,175	11,149
1886.....	307,244	196,346	935,965	435,079	212,101	174,370	16,388	14,706
1887.....	367,709	271,844	772,171	318,700	315,546	273,289	29,298	27,389
1888.....	453,918	329,182	652,127	253,968	368,848	313,536	27,713	25,985
1889.....	366,085	246,318	772,579	368,314	278,977	222,337	25,705	22,897
1890.....	510,755	319,026	925,490	536,244	282,206	211,751	21,747	20,160
1891.....	630,866	414,513	840,927	463,242	347,573	255,557	15,208	14,475
1892.....	653,357	407,707	847,703	562,133	298,532	212,559	14,920	11,101
1893.....	756,435	492,295	777,433	500,223	350,041	217,790	11,799	11,110
1894.....	663,657	242,916	1,146,925	545,431	292,223	69,642	12,689	12,103
Total.....	8,578,566	5,528,450	17,362,415	9,994,402	4,675,299	3,562,533	285,463	241,009
1895.....								
January.....	70,794	23,570	128,714	52,906	27,436	1,608	756	742
February.....	52,817	13,022	97,530	44,456	25,197	1,988	515	498
March.....	45,280	13,673	87,708	45,754	22,980	1,812	598	460

April.....	43,718	14,080	89,781	42,879	59,108	19,898	1,740	1,083
May.....	65,525	21,104	106,712	44,035	84,968	27,522	1,458	1,010
June.....	58,408	19,071	67,202	26,443	58,879	23,263	1,403	1,179
July.....	60,488	18,173	51,179	26,847	34,238	9,582	1,584	1,373
August.....	68,409	20,764	60,357	36,642	40,233	8,988	968	888
September.....	71,077	19,782	66,433	38,525	29,019	5,290	8,189	2,299
October.....	74,306	23,599	113,222	74,347	34,754	5,827	4,596	4,840
November.....	56,480	18,922	108,992	53,858	19,220	1,611	5,676	4,895
December.....	57,271	17,255	112,300	32,057	19,846	2,898	5,174	4,711
Total.....	733,526	222,735	1,064,574	517,686	454,858	108,875	27,615	23,993
January.....	62,204	30,519	172,805	90,108	24,993	4,912		
February.....	45,730	20,892	123,731	72,131	30,232	5,960		
March.....	51,921	19,874	148,802	76,718	30,185	6,161		
April.....	37,142	14,160	141,223	80,134	61,751	29,163		
May.....	50,956	18,327	143,974	73,151	112,320	72,238		
June.....	66,974	23,776	121,904	67,783	118,535	82,518		
July.....	74,258	26,717	108,231	67,971	54,470	24,161		
August.....	77,914	30,514	96,416	66,579	37,236	14,214		
September.....	86,408	32,793	111,260	76,143	32,442	11,681		
October.....	75,665	29,858	144,810	95,707	31,933	9,013		
November.....	80,008	33,095	180,150	74,431	24,461	5,505		
December.....	79,863	26,031	173,204	97,470	32,440	7,674		
Total.....	792,032	313,554	1,513,000	938,376	591,033	273,132	93,921	79,039

1896.

Statement of ship ments by months could not be obtained.

Statement of receipts by months could not be obtained.

NOTE.—A report for calves is made for 1896 only, when 54,820 were received and 23,442 were shipped.

BUREAU OF ANIMAL INDUSTRY.

SIOUX CITY.

Table showing the receipts and shipments of live stock at the Sioux City (Iowa) Stock Yards for the years 1888 to 1896, inclusive.

Year and month.	Cattle.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1888.....	54,768	31,588	431,075	2,210	5,458	1,421	630	290
1889.....	104,915	69,434	583,102	29,935	8,970	1,406	1,078	871
1890.....	167,010	131,954	728,914	43,066	26,689	11,399	1,636	1,226
1891.....	150,912	89,331	397,247	130,804	22,399	12,106	2,853	2,155
1892.....	186,022	102,510	413,891	112,664	42,581	30,008	4,880	3,476
1893.....	180,764	94,825	889,014	131,480	36,840	13,751	2,337	2,169
1894.....	119,008	98,070	399,273	173,199	24,567	15,888	1,303	1,280
Total.....	863,429	611,148	3,386,856	602,394	157,484	73,889	14,167	11,404
1895.								
January.....	8,672	6,621	49,641	11,309	1,639	1,048	.....	.....
February.....	4,601	3,294	34,388	8,169	1,396	800	5	.....
March.....	11,466	8,997	25,641	7,234	906	203	69	69
April.....	9,848	6,068	21,180	4,202	366	211	2	.....
May.....	8,577	6,343	26,902	6,730	1,074	191	48	20
June.....	2,591	2,051	19,012	4,800	227	412	1	1
July.....	5,734	4,146	7,623	2,144	345	.....	17	14
August.....	9,941	8,157	3,970	2,507	1,728	981	41	41
September.....	16,458	12,716	8,867	3,649	1,690	1,184	19	1
October.....	16,945	10,790	88,768	13,126	2,065	1,879	68	45
November.....	8,417	4,946	66,713	26,966	1,009	666	88	75
December.....	7,068	4,683	49,844	26,065	1,408	1,883	66	66
Total.....	110,275	78,742	841,056	114,940	14,396	8,390	419	387
1896.								
January.....	11,867	6,890	81,019	14,227	1,549	1,284	1	1
February.....	11,567	7,785	19,073	4,508	665	420	29	.....
March.....	13,223	8,009	20,795	3,684	670	377	31	.....

Year and month.	Cattle.	Hogs.	Calves.	Sheep.	Total.
1895.					
January.....	3,844	19,498	2,867	31,066	54,315
February.....	2,220	22,241	1,082	20,170	45,713
March.....	3,875	21,384	2,804	18,277	46,339
April.....	3,268	18,116	5,975	21,721	49,080
May.....	2,405	16,563	7,528	19,180	45,676
June.....	3,677	17,061	10,695	10,550	52,383
July.....	5,643	20,200	8,868	5,863	59,574
August.....	6,146	16,796	8,016	29,287	50,245
September.....	5,403	15,618	4,862	42,104	68,087
October.....	4,710	19,862	2,831	48,368	75,771
November.....	5,859	21,379	1,427	22,820	71,485
December.....	7,534	26,560	1,224	15,442	80,820
Total.....	52,974	231,718	57,085	294,928	596,705

WEEHAWKEN.

Table showing the receipts of live stock at Weehawken, N. J., for the years 1895 and 1896.

Year and month.	Cattle.	Hogs.	Calves.	Sheep.	Total.
1895.					
January.....	3,844	19,498	2,867	31,066	56,275
February.....	2,220	22,241	1,082	20,170	45,713
March.....	3,875	21,384	2,804	18,277	46,339
April.....	3,268	18,116	5,975	21,721	49,080
May.....	2,405	16,563	7,528	19,180	45,676
June.....	3,677	17,061	10,695	10,550	52,383
July.....	5,643	20,200	8,868	5,863	59,574
August.....	6,146	16,796	8,016	29,287	50,245
September.....	5,403	15,618	4,862	42,104	68,087
October.....	4,710	19,862	2,831	48,368	75,771
November.....	5,859	21,379	1,427	22,820	71,485
December.....	7,534	26,560	1,224	15,442	80,820
Total.....	52,974	231,718	57,085	294,928	596,705
1896.					
January.....	5,946	24,087	1,460	17,287	48,780
February.....	3,777	17,924	612	23,018	45,331
March.....	3,402	20,077	1,698	21,879	46,986
April.....	984	17,911	4,694	13,086	36,675
May.....	521	8,584	7,134	6,371	22,610
June.....	121	1,807	6,289	1,807	9,024
July.....	442	2,729	6,035	2,045	11,251
August.....	411	1,744	4,321	12,664	19,140
September.....	385	1,719	2,792	14,087	18,983
October.....	453	2,100	1,404	6,838	10,795
November.....	653	1,358	1,358	7,819	11,138
December.....	803	473	924	11,249	13,450
Total.....	17,877	86,709	36,138	186,673	246,797

CINCINNATI.

Table showing the receipts and shipments of live stock by the Cincinnati (Ohio) Union Stock Yards Company for the years 1895 and 1896.

Year and month.	Cattle.		Calves.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.
1895.										
January	14,417	3,303	3,549	49	98,080	38,523	16,343	5,521	287	237
February	11,972	2,261	3,161	67	60,346	19,124	14,663	3,433	160	116
March	12,644	2,338	4,000	31	57,844	21,066	9,804	1,569	140	71
April	15,548	3,442	5,201	105	55,676	21,714	12,652	1,513	284	179
May	18,761	5,842	6,606	64	64,787	20,741	41,884	22,257	205	144
June	14,433	4,641	4,167	171	57,101	20,809	123,451	105,201	98	75
July	15,681	3,310	4,722	163	38,255	16,009	132,804	103,055	121	95
August	14,362	3,421	4,108	163	38,367	16,906	104,654	89,559	217	208
September	16,500	3,896	3,668	86	44,921	19,863	49,096	29,408	525	435
October	18,321	4,355	3,811	78	80,366	36,178	45,741	28,538	431	388
November	13,751	3,852	3,064	100	114,467	50,944	24,552	11,875	863	761
December	13,284	3,373	2,507	32	110,367	55,207	22,103	10,684	534	527
Total	179,704	44,474	47,551	1,134	820,637	335,909	597,497	410,616	3,825	2,872
1896.										
January	15,496	3,366	3,201	42	96,908	40,762	18,553	6,645	377	291
February	10,772	1,655	2,621	19	63,736	34,406	12,225	2,979	299	211
March	12,519	1,459	3,623	.....	71,239	31,537	9,649	1,503	820	228
April	13,775	2,516	5,120	10	63,580	31,226	10,919	824	121	84
May	14,815	3,575	4,945	67	74,474	31,822	34,237	18,888	54	1
June	15,409	3,747	4,376	24	62,577	21,405	112,107	92,912	79	36
July	12,714	2,360	3,816	40	46,161	16,643	123,649	106,235	35	30
August	15,544	3,999	3,325	61	45,550	17,494	76,479	68,221	131	107
September	17,169	5,316	3,331	107	57,756	21,232	29,369	13,575	217	208
October	16,767	4,774	3,231	162	88,832	41,178	23,605	11,597	218	212
November	13,969	2,970	2,587	76	86,419	43,677	15,417	6,801	142	122
December	13,380	3,151	3,027	51	113,945	60,075	14,066	7,475	59	42
Total	172,309	38,878	43,808	659	877,177	391,377	481,255	323,718	2,062	1,524

DETROIT.
Table showing the receipts and shipments of live stock at the Michigan Central Stock Yards (Detroit) for the years 1895 and 1896.

Year and month.	Cattle.		Calves.		Hogs.		Sheep.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1895.								
January.....	2,438	545	694	163	12,499	1,675	22,518	11,886
February.....	2,298	382	646	35	6,499	513	16,989	7,776
March.....	2,577	453	880	39	11,982	2,418	9,198	2,708
April.....	1,919	606	1,180	15	9,445	1,659	6,183	1,285
May.....	1,524	468	1,449	100	9,831	507	4,900	972
June.....	3,156	570	1,983	229	9,813	567	10,874	8,373
July.....	4,681	1,237	1,397	447	5,751	1,818	17,928	8,886
August.....	4,904	1,112	1,117	139	10,873	3,006	21,364	7,225
September.....	4,450	1,519	1,049	378	11,945	2,957	19,147	10,036
October.....	5,423	1,931	1,130	549	13,663	4,068	22,228	8,129
November.....	5,902	2,397	1,087	424	20,577	5,132	27,579	11,723
December.....	3,695	1,414	487	216	19,914	844	14,841	7,474
Total.....	42,857	12,083	12,988	2,794	151,162	25,154	194,009	81,323
1896.								
January.....	4,082	1,236	680	279	21,180	1,563	17,408	7,707
February.....	3,953	1,106	710	295	24,070	3,023	16,297	7,047
March.....	2,419	415	885	200	13,838	1,608	8,785	8,483
April.....	3,013	650	1,336	220	15,299	2,972	6,347	2,157
May.....	4,802	2,043	2,420	1,177	19,149	579	7,158	1,528
June.....	5,562	3,397	1,857	996	13,103	938	9,525	8,474
July.....	6,350	3,516	1,166	125	12,936	922	9,943	4,198
August.....	7,010	3,735	1,145	498	18,457	2,461	10,277	3,750
September.....	3,830	1,798	612	33	14,498	1,130	6,966	1,214
October.....	5,154	1,368	1,020	303	20,477	1,690	11,279	3,863
November.....	3,540	518	751	185	20,064	1,939	8,654	3,583
December.....	4,457	1,368	740	63	20,749	1,805	13,257	6,582
Total.....	54,912	21,128	13,292	4,351	223,708	20,620	125,791	50,576

INDIANAPOLIS.

Table showing receipts and shipments at stock yards, Indianapolis, Ind., for the years 1878 to 1896, inclusive.

Year and month.	Cattle.		Hogs.		Sheep.		Horses.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1878.....	118,945	105,117	986,699	284,095	76,107	69,997	5,919	5,770
1879.....	128,728	104,845	1,123,409	464,983	111,927	100,879	9,388	9,061
1880.....	139,655	110,559	1,321,876	599,514	148,795	132,904	9,801	8,901
1881.....	144,144	120,611	1,129,894	637,590	228,629	208,946	9,565	8,900
1882.....	114,746	91,043	653,597	324,786	288,698	269,695	15,967	15,097
1883.....	121,448	102,349	931,121	443,900	254,653	237,219	18,800	17,795
1884.....	121,179	99,697	1,003,139	437,699	157,265	139,881	16,949	16,065
1885.....	112,673	98,498	1,067,728	568,438	166,806	148,169	13,688	12,595
1886.....	96,698	73,494	1,083,387	394,231	120,389	101,118	16,168	14,947
1887.....	93,884	66,863	1,149,400	523,448	108,016	98,602	20,768	19,795
1888.....	87,169	63,951	895,575	447,201	84,074	70,144	20,061	19,068
1889.....	104,388	76,789	1,157,998	515,078	87,964	73,669	15,685	14,321
1890.....	120,168	91,649	1,446,649	627,208	77,448	66,495	16,775	15,394
1891.....	104,875	68,999	1,319,900	654,518	68,021	50,208	9,976	9,554
1892.....	102,100	69,143	1,123,696	612,459	62,668	46,665	8,864	8,419
1893.....	85,581	51,819	878,868	505,190	68,203	68,192	6,583	6,187
1894.....	91,017	54,457	963,511	495,678	108,964	89,379	7,969	6,943
Total.....	1,877,322	1,446,380	18,209,932	8,540,914	2,222,129	1,964,600	221,224	203,235
1895.								
January.....	7,761	3,836	118,366	40,817	12,763	11,678	1,120	955
February.....	5,461	2,835	62,375	30,119	12,618	11,257	1,111	912
March.....	8,819	2,760	66,581	41,731	7,084	5,989	1,795	1,519
April.....	6,870	2,845	54,698	36,269	8,967	2,978	1,617	1,015
May.....	6,645	2,742	100,429	42,316	9,199	5,419	1,582	1,420
June.....	9,569	6,994	87,610	46,254	6,573	4,531	1,946	1,068
July.....	11,883	7,964	61,790	45,980	9,874	7,121	1,370	917
August.....	14,161	10,065	87,355	56,233	12,978	9,326	1,013	916

September.....	11,461	7,899	66,899	48,001	9,894	6,978	1,677	1,868
October.....	12,176	7,662	112,306	59,900	17,747	11,180	2,205	1,870
November.....	6,966	3,074	140,060	96,744	10,215	8,297	1,865	1,695
December.....	9,715	3,494	148,826	51,709	11,000	9,961	1,674	1,408
Total.....	106,439	61,660	1,106,724	529,009	123,497	94,736	18,120	14,669
1896.								
January.....	8,178	2,911	124,585	45,564	11,594	10,008	2,362	2,078
February.....	7,389	2,764	68,896	34,466	5,811	4,407	2,183	1,756
March.....	7,749	2,557	71,504	34,473	3,943	2,476	2,112	1,463
April.....	10,530	5,467	106,882	39,636	4,598	2,668	2,160	1,671
May.....	16,664	10,807	129,127	34,903	5,848	8,478	1,508	1,002
June.....	13,818	8,061	132,775	53,121	11,114	7,709	1,226	967
July.....	11,844	6,653	96,023	51,826	10,885	10,422	1,255	909
August.....	12,974	7,365	82,847	54,690	21,542	12,573	1,062	793
September.....	11,552	4,081	90,806	57,177	14,562	7,627	1,562	983
October.....	13,741	5,712	115,534	60,777	9,995	6,707	2,103	1,696
November.....	9,325	3,713	96,471	32,548	6,867	8,168	2,769	2,246
December.....	11,559	3,399	140,938	24,360	10,298	8,829	2,253	1,843
Total.....	126,263	63,399	1,255,405	523,421	120,990	79,599	22,546	17,402

ST. LOUIS.

Table showing receipts and shipments of live stock, at the St. Louis (Mo.) Union Stock Yards, for the years 1895 and 1896.

Year.	Cattle.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1895.....	105,678	10,344	340,424	49,941	71,002	11,859	21,371	2,110
1896.....	97,266	8,908	383,737	76,946	66,766	6,576	15,776	8,969
Total.....	203,014	19,247	723,151	126,889	124,980	17,135	37,147	6,069

ST. JOSEPH.

Table showing receipts and shipments of live stock, at the St. Joseph (Mo.) Stock Yards for the years 1895 and 1896.

Year.	Cattle.		Hogs.		Sheep.		Horses.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1895.....	49,247	49,133	252,108	252,025	22,280	22,280	1,820	1,820
1896.....	89,017	89,008	198,298	192,980	24,169	24,169	3,408	8,408
Total.....	88,254	88,139	445,402	445,005	46,450	46,450	5,228	5,228

NOTE.—The shipments include the live stock sent out by railroad and driven out.

BOSTON.

Table showing the receipts and shipments of live stock at Boston, Mass., for the years 1895 and 1896.

Year and month.	Cattle.		Sheep.		Horses.		Cattle.		Sheep.		Horses.	
	Re-ceipts.	Ship-ments.	Re-ceipts.	Ship-ments.	Re-ceipts.	Ship-ments.	Re-ceipts.	Ship-ments.	Re-ceipts.	Ship-ments.	Re-ceipts.	Ship-ments.
1895.												
January.....	8,837	8,796	19,962	19,875	89	.....	14,214	13,994	14,924	14,613	290	.....
February.....	9,100	8,996	16,156	15,279	385	.....	14,156	14,007	12,835	12,480	948	.....
March.....	8,728	8,322	14,333	14,249	720	.....	16,045	15,555	15,617	15,498	1,415	.....
April.....	8,410	8,124	11,754	11,135	590	.....	17,462	16,901	16,114	15,637	883	.....
May.....	11,712	11,209	13,981	12,218	48	.....	15,599	14,831	16,914	16,011	272	.....
June.....	10,893	10,273	16,111	13,582	16	.....	16,746	16,448	16,322	16,249	279	.....
July.....	9,744	9,501	10,210	10,153	16	.....	15,126	14,650	4,912	4,890	241	.....
August.....	8,608	8,237	11,233	11,233	.....	.....	11,128	10,361	6,815	6,238	385	.....
September.....	10,013	9,444	12,070	11,968	.....	.....	13,455	12,911	3,235	3,065	350	.....
October.....	11,919	11,066	23,214	27,280	.....	.....	11,244	10,933	2,987	2,981	74	.....
November.....	8,870	8,223	16,462	15,236	.....	.....	10,308	9,966	9,307	9,238	97	.....
December.....	13,033	12,458	26,554	21,148	147	.....	10,453	10,432	7,594	7,595	226	.....
Total.....	119,666	114,422	197,070	186,356	1,931	.....	166,134	165,754	127,101	120,485	5,470	.....
1896.												
January.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
March.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
September.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
October.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
November.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
December.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

PHILADELPHIA.

Table showing the receipts and shipments of live stock at the Philadelphia (Pa.) stock yards for the years 1895 and 1896.

Year and month.	Cattle.		Hogs.		Sheep.		Horses.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1895.								
January	9,869	1,264	24,684	1,226	39,816	6,136	1,080	533
February	9,668	1,549	22,046	919	42,195	6,842	1,040	664
March	11,562	18,819	851	31,916	3,879	3,879	2,700	856
April	12,994	2,181	22,300	771	43,375	5,080	1,820	765
May	11,114	1,823	19,899	598	37,898	6,399	1,840	622
June	10,812	2,683	18,133	388	41,279	4,289	1,160	442
July	12,195	1,689	19,933	255	60,774	9,894	720	373
August	10,748	2,158	14,916	185	57,078	9,895	1,040	843
September	13,333	2,193	25,306	145	64,781	5,375	1,820	517
October	10,500	2,800	24,070	747	57,012	4,282	1,700	986
November	10,221	2,075	21,533	498	48,777	3,192	1,820	696
December	11,475	1,645	27,200	595	52,812	2,730	440	326
Total	132,290	23,602	259,129	7,188	577,151	66,813	15,680	7,013
1896.								
January	11,290	2,149	23,761	897	45,979	3,377	---	570
February	8,759	2,799	20,615	240	33,813	1,799	---	780
March	12,020	2,248	24,333	304	41,512	2,455	---	906
April	8,612	1,739	20,284	45	30,248	2,888	---	1,005
May	9,521	1,677	21,672	34	40,125	5,192	---	1,041
June	11,639	2,338	27,811	126	43,456	5,433	---	615
July	8,562	1,233	16,597	108	37,212	8,193	---	422
August	11,073	1,944	21,333	43	43,970	6,972	---	297
September	10,847	2,942	21,617	241	37,016	6,675	---	451
October	9,962	2,556	24,704	505	41,957	4,213	---	448
November	10,720	2,430	29,682	737	39,022	1,848	---	490
December	8,470	1,959	24,818	685	34,398	3,290	---	255
Total	121,475	23,034	275,497	3,945	488,618	52,255	---	7,227

BALTIMORE.

Table showing the receipts and shipments of live stock at the Union Stock Yards, Baltimore, Md., for the years 1895 and 1896.

Year and month.	Cattle.		Calves.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.
1895.										
January.....	8,456	4,556	1,149	204	60,389	13,440	25,864	14,975	866	835
February.....	6,828	4,838	1,354	61	47,619	9,585	24,132	11,488	1,314	1,103
March.....	7,131	4,063	1,438	109	53,322	9,007	25,662	13,858	1,378	885
April.....	6,731	3,537	1,038	121	63,583	9,268	27,127	15,233	827	575
May.....	8,478	4,360	1,928	247	58,679	7,252	32,189	16,402	553	345
June.....	7,408	4,565	1,890	724	54,812	10,064	57,128	36,238	555	354
July.....	10,507	5,976	2,582	1,353	48,190	10,779	56,799*	42,977	527	388
August.....	14,310	10,361	2,427	1,201	41,269	8,234	62,955	46,614	615	446
September.....	17,430	10,733	2,600	1,335	49,907	12,293	59,927	36,038	938	794
October.....	21,150	15,283	2,379	813	65,062	12,960	48,887	31,631	938	792
November.....	11,127	7,940	1,105	141	75,071	15,876	32,201	17,968	1,074	771
December.....	10,760	7,187	982	34	65,678	16,118	29,609	16,708	1,518	1,490
Total.....	130,306	83,039	21,553	6,345	681,570	133,906	482,661	301,604	11,076	8,768
1896.										
January.....	9,972	5,965	1,131	164	76,944	15,563	27,715	16,445	1,762	1,649
February.....	9,305	6,662	1,200	271	73,456	13,604	18,346	7,230	1,627	1,400
March.....	8,598	5,531	1,268	69	68,148	14,873	17,323	8,916	1,014	965
April.....	9,004	6,001	1,331	13	58,497	14,364	26,602	14,613	682	487
May.....	9,273	5,868	1,665	140	67,219	15,619	22,909	8,768	564	485
June.....	11,271	6,765	1,707	832	63,211	13,823	41,469	36,374	304	305
July.....	9,765	7,911	1,118	642	64,360	12,320	52,779	37,525	297	136
August.....	11,479	7,669	1,033	396	60,354	13,578	57,474	39,822	399	176
September.....	18,857	12,902	1,346	454	58,555	11,370	41,314	22,773	562	345
October.....	22,331	18,868	1,860	270	81,811	16,865	38,379	24,868	709	570
November.....	15,239	12,001	1,304	155	75,359	19,358	30,862	18,023	722	576
December.....	13,388	8,818	985	96	66,960	14,978	19,066	9,360	467	520
Total.....	148,428	104,446	15,438	2,809	804,793	176,345	388,638	238,220	8,996	7,380

LOUISVILLE.
Table showing the receipts and shipments of live stock at the Bourbon Stock Yards, Louisville, Ky., for the years 1895 and 1896.

Year and month.	Cattle.		Calves.		Hogs.		Sheep.		Horses.	
	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.
1895.										
January	6,932	2,479	907	103	56,160	32,663	2,163	771	5	4
February	5,960	1,760	694	41	41,203	19,767	3,467	1,196	29	26
March	7,177	2,056	955	18	38,027	18,020	1,666	1,061	58	40
April	6,806	1,960	1,043	24	29,405	14,643	4,807	2,545	45	29
May	6,160	2,137	1,331	41	24,531	9,865	26,160	30,479	61	25
June	5,039	1,554	982	47	23,654	10,867	26,216	24,066	17	10
July	5,297	781	1,016	77	21,449	8,410	35,662	23,074	68	39
August	5,289	509	891	96	17,173	5,164	85,824	30,161	21	15
September	6,777	968	898	33	19,197	5,339	24,719	16,394	73	60
October	8,130	1,783	987	92	88,545	23,479	18,202	12,689	243	190
November	6,137	1,060	748	16	70,999	31,670	6,453	4,569	166	110
December	6,437	961	582	31	75,429	36,845	8,762	2,231	187	89
Total	76,301	17,983	10,384	619	451,767	218,601	187,651	143,106	968	643
1896.										
January	7,003	1,673	861	42	81,225	43,311	4,890	2,719	230	213
February	7,182	1,968	727	35	48,970	31,194	1,839	583	213	211
March	6,025	2,135	925	—	61,067	41,919	2,416	735	171	127
April	4,782	1,090	973	31	54,471	35,121	4,770	2,387	46	17
May	4,957	1,695	1,066	15	60,299	38,063	20,706	15,887	75	64
June	5,716	668	1,040	46	51,765	29,751	49,909	45,944	46	41
July	5,443	2,438	1,047	163	37,010	22,496	75,445	66,541	30	25
August	7,294	1,731	878	128	35,980	17,706	45,080	37,725	53	37
September	9,084	4,431	873	146	47,927	30,862	16,676	16,062	101	67
October	8,140	8,475	941	50	87,628	61,449	11,517	8,613	107	134
November	12,290	6,416	827	60	85,661	56,062	6,820	4,029	199	163
December	10,524	7,800	906	284	115,275	79,240	2,629	1,822	133	74
Total	95,510	40,654	11,093	1,000	706,688	487,713	243,696	203,817	1,394	1,172

RICHMOND.

Table showing the receipts and shipments of live stock at Richmond, Va., for the years 1895 and 1896.

Year and month.	Cattle.		Hogs.		Sheep.		Year and month.	Cattle.		Hogs.		Sheep.		
	Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.		Receipts.	Ship-ments.	Receipts.	Ship-ments.	Receipts.	Ship-ments.	
1895.														
January	1,645		2,232		1,216		January	1,532		4,338		1,042		
February	1,513		2,907		1,306		February	1,953		4,086		879		
March	2,080		2,216		1,231		March	1,734		3,142		597		
April	1,607		3,061		1,429		April	1,125		2,423		1,137		
May	1,306		1,863		1,238		May	946		2,032		1,540		
June	1,569		1,438		2,233		June	1,011		2,140		1,451		
July	1,680		1,280		1,515		July	1,244		2,008		2,661		
August	1,896		1,865		2,286		August	1,376		1,930		1,496		
September	3,242		2,188		2,411		September	3,280		2,191		1,312		
October	3,951		2,723		1,672		October	3,464		3,247		1,898		
November	2,423		2,875		2,556		November	3,342		3,486		1,684		
December	2,468		3,221		732		December	2,036		3,560		686		
Total	25,340		27,419		19,357		Total	22,462		34,579		16,385		

NOTE.—About 8,000 head of horses and mules are sold in the Richmond market every year. Most of these are sold at weekly auction sales and go South.

CHARLESTON.

Table showing the receipts and shipments of live stock at the Charleston (S. C.) Stock Yards for the years 1895 and 1896.

Year.	Cattle.		Hogs.		Sheep.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1895						
1896						
Total	18,700		24,000		11,400	

NEWPORT NEWS.

Table showing the receipts and shipments of live stock at Newport News, Va., for the years 1895 and 1896.

Year.	Cattle.		Hogs.		Sheep.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1895.....		16,682				24,094
1896.....		18,942				2,587
Total.....		35,624				26,681

NOTE—About 100 head of cattle per month are handled at Newport News on the local market.

DENVER.

Table showing the receipts and shipments of live stock, by the Denver (Colo.) Union Stock Yard Company, for the years 1886 to 1896, inclusive.

Year.	Cattle.		Hogs.		Sheep.		Horses and mules.	
	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.	Receipts.	Shipments.
1886.....	54,229	54,212	23,461	23,402	25,949	25,909	4,955	4,979
1887.....	38,412	38,284	53,578	53,687	38,879	38,879	5,280	5,283
1888.....	105,782	105,883	63,897	63,897	108,582	108,194	7,125	7,115
1889.....	177,061	177,006	74,955	74,902	157,648	158,094	6,645	6,662
1890.....	113,664	113,611	107,025	107,078	177,888	177,900	5,720	5,722
1891.....	141,204	141,284	80,080	80,080	165,616	165,616	8,680	8,599
1892.....	143,211	143,183	88,413	88,413	134,368	134,368	11,974	11,974
1893.....	154,730	154,722	62,111	62,095	130,373	130,373	7,987	7,987
1894.....	147,508	147,575	94,069	94,115	138,960	138,960	6,009	6,008
1895.....	185,645	185,574	47,598	47,598	156,412	156,412	3,051	3,052
1896.....	202,013	202,073	56,537	56,537	180,689	180,689	2,537	2,537
Total.....	1,463,446	1,463,397	746,044	746,084	1,413,404	1,413,404	69,857	69,863

May.....	5,798	4,813	4,918	688	3,862	3,554	138	114
June.....	4,182	3,171	2,275	103	795	795	131	119
July.....	2,196	1,066	1,890	250	747	231	177	115
August.....	3,030	2,063	1,364	507	135	135	138	110
September.....	2,678	1,811	3,862	544	250	.....	280	228
October.....	1,553	404	6,060	81	240	.....	177	167
November.....	2,484	1,463	6,184	1,065	.....	.....	315	225
December.....	5,218	3,531	10,968	1,203	80	.....	317	271
Total.....	49,628	36,568	60,883	7,287	15,986	14,004	2,267	1,932
1896.								
January.....	3,230	1,563	15,942	1,040	.....	.....	475	464
February.....	5,946	4,007	14,177	101	689	245	822	174
March.....	3,292	2,396	17,776	518	.....	.....	171	148
April.....	8,382	7,379	16,860	1,197	306	.....	47	47
May.....	4,032	1,571	10,864	282	1,397	944	63	63
June.....	7,236	5,962	11,833	1,396	399	248	50	80
July.....	1,968	1,061	8,136	1,909	371	271	76	76
August.....	2,243	1,443	4,607	1,360	548	137	170	170
September.....	2,436	1,405	6,022	1,486	44	.....	109	98
October.....	5,012	3,038	12,574	2,486	103	.....	174	174
November.....	9,475	8,704	13,094	4,046	307	.....	133	101
December.....	13,143	12,475	10,315	2,839	.....	.....	229	300
Total.....	65,726	50,974	141,430	18,594	3,744	1,945	1,869	1,765

RANGE OF PRICES OF LIVE STOCK AT CHICAGO.

Table showing range of prices for live stock at Chicago for the years 1891 to 1896, inclusive.

Year and month.	Cattle.					Hogs.			
	Native steers, 1,500 to 1,800 pounds.	Native steers, 1,200 to 1,500 pounds.	Native cows, 800 to 1,100 pounds.	Stockers and feeders.	Texas and westerns.	Heavy pack- ing, 250 to 500 pounds.	Mixed pack- ing, 200 to 250 pounds.	Light bacon, 150 to 200 pounds.	
1896.									
January	\$3.80 to \$5.00	\$3.20 to \$4.90	\$1.25 to \$4.00	\$2.25 to \$4.00	\$2.55 to \$4.10	\$3.25 to \$4.45	\$3.40 to \$4.45	\$3.45 to \$4.45	
February	3.65 4.75	3.10 4.70	1.25 4.20	2.50 4.00	2.65 4.10	3.60 4.35	3.70 4.35	3.70 4.35	
March	3.60 4.75	3.10 4.70	1.00 3.85	2.50 3.80	2.75 4.40	3.50 4.17½	3.65 4.20	3.70 4.25	
April	3.40 4.75	3.00 4.75	1.25 4.15	2.50 3.95	2.65 4.15	3.05 3.85	3.25 4.00	3.35 4.15	
May	3.60 4.55	3.30 4.50	1.25 4.25	2.50 4.25	2.60 4.25	3.00 3.60	3.10 3.65	3.20 3.75	
June	3.65 4.50	3.35 4.65	.75 4.10	1.90 3.85	2.40 4.10	2.70 3.40	2.95 3.45	3.05 3.60	
July	3.75 4.85	3.25 4.80	1.00 4.35	2.20 3.80	2.85 3.85	3.00 3.50	3.00 3.50	3.20 3.70	
August	3.70 4.85	3.20 4.90	1.00 4.25	2.00 3.85	2.10 4.10	2.50 3.50	2.85 3.60	2.95 3.75	
September	3.80 5.25	3.15 5.30	1.00 4.25	2.25 3.90	2.55 4.40	2.40 3.35	2.75 3.50	2.80 3.50	
October	4.00 5.15	3.25 5.30	1.00 4.25	2.10 3.85	2.40 4.25	2.55 3.60	2.90 3.65	2.90 3.65	
November	4.25 5.35	3.50 5.45	1.40 4.50	2.40 4.10	2.65 4.25	2.90 3.65	3.10 3.70	3.10 3.67½	
December	4.40 6.50	3.45 6.25	1.00 4.50	2.50 4.10	2.60 5.50	2.90 3.65	3.10 3.70	3.10 3.65	
Range 1896	3.40 6.50	2.90 6.25	.75 4.50	1.90 4.10	2.10 5.50	2.40 4.45	2.75 4.45	2.80 4.45	
Range 1895	3.60 6.80	2.90 6.40	.75 5.75	1.75 5.15	1.90 5.75	3.25 5.45	3.25 5.55	3.25 5.70	
Range 1894	3.00 6.60	2.90 6.00	.75 4.40	1.30 4.15	1.50 5.00	3.00 6.75	3.90 6.65	3.90 6.45	
Range 1893	4.00 6.75	2.90 6.50	.75 5.00	1.90 4.90	1.60 6.00	3.80 8.75	4.25 8.65	4.40 8.50	
Range 1892	3.75 7.00	2.85 6.35	.75 4.00	1.50 4.10	1.50 5.25	3.70 7.00	3.65 6.70	3.60 6.85	
Range 1891	4.00 7.15	2.70 6.50	.75 4.60	1.40 4.75	1.90 5.60	3.25 5.70	3.25 5.75	3.15 5.95	
Sheep.									
Year and month.	Sheep.			Horses.					
	Native sheep, 60 to 100 pounds.	Native lambs, 40 to 100 pounds.	Western sheep, 70 to 150 pounds.	Texas and Mexican sheep.	Draft horses.	Car- riage teams.	Driv- ers.	Gen- eral use.	Sad- dlers.
1896.									
January	\$1.50 to \$4.00	\$2.50 to \$5.00	\$3.10 to \$3.75	\$3.00 to \$3.25	\$115	\$200	\$30	\$40	\$100
February	1.60 4.00	2.50 4.85	3.00 3.75	2.75 3.35	125	325	90	65	100
March	2.20 4.00	3.00 4.85	2.75 3.90	2.75 3.30	135	335	90	65	110
South- ern horses.									
January								\$60	\$35
February								60	35
March								65	35

April.....	2.00	3.00	3.00	5.00	2.50	3.85	2.25	3.75	125	325	100	70	110	05	38
May.....	1.75	4.00	3.00	5.45	3.35	4.10	1.75	3.75	115	335	100	70	120	05	38
June.....	1.25	4.00	2.00	6.00	2.25	4.30	1.25	3.70	110	300	85	65	110	00	30
July.....	1.25	4.25	2.50	6.50	1.50	4.00	1.00	3.70	105	300	80	60	100	00	30
August.....	1.25	3.00	2.50	6.00	1.15	3.50	1.50	3.30	105	275	75	60	90	55	30
September.....	1.40	3.25	1.85	5.50	1.40	3.50	1.00	3.25	110	300	70	60	90	00	30
October.....	1.25	3.50	2.25	5.00	1.25	3.35	1.40	3.00	105	290	70	55	85	55	35
November.....	.75	4.25	2.50	5.50	1.25	3.75	1.50	3.25	110	275	70	60	75	00	30
December.....	1.50	4.50	2.50	5.00	2.00	3.85	2.25	3.50	110	275	70	60	70	00	30
Range 1886.....	.75	4.00	1.85	6.00	1.15	4.30	1.25	3.75							
Range 1885.....	.75	5.50	1.75	6.35	1.50	5.35	1.00	5.15							
Range 1884.....	.50	5.40	1.00	6.00	1.10	5.40	1.00	4.50							
Range 1883.....	.75	6.25	2.25	7.55	1.25	6.45	1.25	5.80							
Range 1882.....	2.25	6.00	3.00	8.25	3.00	6.75	2.25	6.35							
Range 1881.....	2.00	7.00	3.25	8.50	3.25	6.85	2.65	5.75							

The 90,000 horses sold at the Union Stock Yards in 1886
were valued at \$1,623,025.

INSPECTION AND MOVEMENT OF SHEEP.

Table showing the inspection by the Government and movement of sheep at the principal stock centers for the year 1896.

Location.	Sheep inspected.			Condemned.		Disposition of sheep condemned.							
	Passed for local abattoirs.	Passed for cities and miscellaneous buyers.	Total number passed.	Condemned in 1897.	Held over from 1896.	Total condemned.	Condemned on post-mortem.	Passed on post-mortem.	Shipped as stock-ers.	Died in yards.	Re-leased.	Held over June 30, 1897.	Killed by city inspection.
Chicago.....	2,006,960	971,978	3,578,938	4,680	127	4,807	440	2,131	344	21	.....	339	1,539
Kansas City.....	770,067	310,701	1,080,768	1,480	35	1,515	218	642	247	139	180	19	.....
South Omaha.....	357,172	201,054	558,226	1,327	.....	1,327	445	12	860	.....	1	.....	.....
National Stock Yards, East Saint Louis, Ill.....	390,240	175,574	481,814	1,481	11	1,492	5	.....	1,218	137	111	.....	1
St. Louis.....	4,988	37,814	42,332	20	.....	20	5	.....	12	69	.....	.....	.....
St. Joseph.....	5,304	9,639	15,243	2	.....	2	.....	.....	1	1	.....	.....	.....
Sioux City.....	2,458	7,205	9,663	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Indianapolis.....	3,331	101,114	104,465	1,031	.....	1,031	20	30	877	77	9	.....	.....
South St. Paul.....	9,839	79,777	89,616	49	.....	49	48	.....	.....	1	.....	.....	.....
Milwaukee.....	15,070	9,253	24,323	76	.....	76	16	31	29	.....	.....	.....	.....
Pittsburg ^c	4,036	399,096	273,132	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Buffalo ^c	6,321	681,174	687,485	339	.....	369	34	235	89	10	1	.....	.....
Total.....	4,001,820	2,854,299	6,046,035	10,621	173	10,994	1,327	3,061	3,686	415	702	488	1,527

^a Killed.

^b Five of this number were killed. ^c Inspection began at Pittsburg on February 8, 1897, and at Buffalo on March 1, 1897.

NOTE.—122,094 were dipped, and 14,291 were quarantined, being affected with scab.

ANIMALS IMPORTED FOR BREEDING PURPOSES.

Cattle, sheep, and swine imported into the United States for breeding purposes through ports along the Canadian border.

PORT HURON, MICH.

Date of inspection.	Name of importer.	Address.	Breed and kind.	Number.
1896.				
July 15	J. W. Neal.....	Bay City, Mich.....	Oxford sheep.....	1
Aug. 11	A. D. McMichael.....	St. Clair, Mich.....	Berkshire swine.....	2
Aug. 12	G. J. Campbell.....	Ripton, Ohio.....	Oxford sheep.....	7
Aug. 13	A. J. Wright.....	Bay City, Mich.....	Yorkshire swine.....	3
Aug. 14	George McKorrow.....	Packwaukee, Wis.....	Oxford sheep.....	29
Aug. 14	do.....	do.....	Southdown sheep.....	7
Aug. 24	J. G. Boynton.....	Rochester, Minn.....	Shropshire sheep.....	2
Aug. 27	F. W. Harding.....	Waukesha, Wis.....	Cotswold sheep.....	32
Aug. 27	do.....	do.....	Shropshire sheep.....	10
Aug. 27	do.....	do.....	Dorset sheep.....	2
Aug. 27	do.....	do.....	Lincoln sheep.....	7
Aug. 31	H. H. Cleaver.....	Stoutsville, Mo.....	Leicester sheep.....	3
Sept. 1	George Bickford.....	Ovid, Mich.....	Lincoln sheep.....	8
Sept. 10	J. H. Patrick.....	Reeseville, Wis.....	do.....	43
Sept. 11	C. C. Rice.....	Armington, Mont.....	do.....	121
Sept. 12	Rogers & Stewart.....	Durand, Mich.....	Shropshire sheep.....	1
Sept. 12	E. Hurd.....	Lansing, Mich.....	do.....	1
Sept. 15	do.....	do.....	do.....	1
Sept. 15	J. W. Neal.....	Bay City, Mich.....	do.....	2
Sept. 17	John Ross, jr.....	Bucyrus, Ohio.....	do.....	60
Sept. 21	John Luchernbill.....	Durand, Mich.....	Lincoln sheep.....	1
Sept. 21	S. H. McLellan.....	Portland, Mich.....	Cotswold sheep.....	2
Sept. 21	Robert Head.....	Sears, Mich.....	do.....	1
Sept. 22	E. K. Carr.....	Jonesville, Mich.....	Shropshire sheep.....	2
Sept. 25	William Oliver.....	Springfield, Ill.....	do.....	1
Sept. 25	do.....	do.....	Lincoln sheep.....	20
Sept. 29	Rob Jones.....	Fort Steel, Wyo.....	Oxford sheep.....	66
Oct. 5	Melvin Jones.....	Vassar, Mich.....	Berkshire swine.....	1
Oct. 6	D. P. Clarke.....	Grand Junction, Colo.....	Lincoln sheep.....	50
Oct. 6	Fred Wilson.....	Conde, S. Dak.....	Cotswold sheep.....	3
Oct. 6	William Grimes.....	Yale, Mich.....	Leicester sheep.....	1
Oct. 9	Wesley Schlichter.....	Brown City, Mich.....	Yorkshire swine.....	2
Oct. 10	Joseph Dawson.....	Marlette, Mich.....	Leicester sheep.....	1
Oct. 10	George Harding.....	Waukesha, Wis.....	Cotswold sheep.....	158
Oct. 10	do.....	do.....	Dorset sheep.....	25
Oct. 10	do.....	do.....	Shropshire sheep.....	2
Oct. 10	E. O. Woods.....	Flint, Mich.....	Oxford sheep.....	11
Oct. 12	A. O. Fox.....	Oregon, Wis.....	Shropshire sheep.....	1
Oct. 13	H. Bishop.....	Millington, Mich.....	Lincoln sheep.....	1
Oct. 17	A. J. Richardson.....	Thayer, Nebr.....	Leicester sheep.....	1
Oct. 20	Isaac Smith.....	St. John, Mich.....	Lincoln sheep.....	2
Oct. 21	Charles Borland.....	Williamsburg, Iowa.....	do.....	1
Oct. 22	George Maney.....	Oconomowoc, Wis.....	do.....	1

Cattle, sheep, and swine imported into the United States for breeding purposes through ports along the Canadian border—Continued.

PORT HURON, MICH.—Continued.

Date of inspection.	Name of importer.	Address.	Breed and kind.	Number.
1896.				
Oct. 26	H. H. Cleaver.....	Stoutsville, Mo.....	Leicester sheep.....	2
Nov. 2	E. Waverly.....	Los Angeles, Cal.....	Tamworth swine.....	1
Oct. 29	George Harding & Son....	Waukesha, Wis.....	Cotswold sheep.....	166
Oct. 30	Isaac Smith.....	St. John, Mich.....	Lincoln sheep.....	1
Oct. 31	Charles Sheldon.....	St. Clair, Mich.....	Leicester sheep.....	1
Nov. 2	H. White.....	Evart, Mich.....	do.....	1
Nov. 3	Henry Turner.....	Brown City, Mich.....	do.....	1
Nov. 4	Smart & Webster.....	Market Lane, Idaho.....	Lincoln sheep.....	75
Nov. 5	E. S. Plumb.....	Lafayette, Ind.....	Shropshire sheep.....	1
Nov. 9	George R. Hyde.....	Doster, Mich.....	Leicester sheep.....	15
Nov. 10	R. Scott.....	Portland, Oreg.....	Cotswold sheep.....	1
Nov. 10	A. E. Burrough.....	Morley, Iowa.....	Berkshire swine.....	1
Nov. 11	L. T. McFee.....	Lenox, Iowa.....	Shropshire sheep.....	1
Nov. 11	H. Stewart.....	Durand, Mich.....	do.....	2
Nov. 11	F. C. Babbitt.....	Boyd, Wis.....	Southdown sheep.....	1
Nov. 11	T. H. Orcutt.....	Rockyford, Colo.....	Cotswold sheep.....	51
Nov. 12	A. O. Fox.....	Oregon, Wis.....	Shropshire sheep.....	55
Nov. 13	Paithrop & Hackney.....	Mount Morris, Mich.....	Berkshire swine.....	1
Nov. 16	N. H. Gentry.....	Sedalia, Mo.....	do.....	1
Nov. 17	James Massie.....	Capac, Mich.....	Shropshire sheep.....	1
Nov. 18	Alex. McKenzie.....	Clarksville, Mich.....	do.....	1
Nov. 18	Ames Agricultural College.	Ames, Iowa.....	Yorkshire swine.....	2
Nov. 19	M. Bricker.....	Belding, Mich.....	Lincoln sheep.....	1
Nov. 21	Emil Geise.....	Clark Station, S. Dak.....	Leicester sheep.....	2
Nov. 21	William Mason.....	Avoca, Mich.....	do.....	1
Nov. 23	George R. Hyde.....	Delton, Mich.....	do.....	1
Nov. 23	J. Whitmer.....	Brown City, Mich.....	Yorkshire swine.....	2
Nov. 23	J. F. Hyde.....	Mount Sterling, Iowa.....	Shropshire sheep.....	2
Nov. 24	John Johnston.....	Sandbeach, Mich.....	Lincoln sheep.....	1
Nov. 24	Dr. D. F. Miller.....	Flint, Mich.....	Oxford sheep.....	117
Nov. 27	J. W. Boynton.....	Rochester, Minn.....	Shropshire sheep.....	49
Nov. 28	F. L. King.....	Charlotte, Mich.....	Lincoln sheep.....	12
Nov. 28	E. Buchanan.....	Sterling, Colo.....	Cotswold sheep.....	165
Nov. 30	Duncan Paterson.....	Lambs Corner, Me.....	Leicester sheep.....	2
Dec. 3	Robert Jones.....	Casper, Wyo.....	Oxford sheep.....	255
Dec. 3	do.....	do.....	Lincoln sheep.....	2
Dec. 4	G. A. Lockwood.....	Chariton, Iowa.....	do.....	4
Dec. 4	H. A. Daniels.....	Flint, Mich.....	do.....	1
Dec. 4	J. E. Wells.....	Mitchell, S. Dak.....	do.....	2
Dec. 14	William Pearsell.....	Lansing, Mich.....	do.....	1
Dec. 18	George Harding & Son....	Waukesha, Wis.....	Cotswold sheep.....	76
Dec. 18	H. S. Brown.....	Minneapolis, Minn.....	Shropshire sheep.....	12
Dec. 18	J. W. Boles.....	Auxvasse, Mo.....	do.....	1
Dec. 18	M. H. Smith.....	Baraboo, Wis.....	do.....	26
Dec. 18	C. J. Poulter.....	Big Mound, Iowa.....	do.....	4
Dec. 18	E. C. & J. A. White.....	Mount Carroll, Ill.....	do.....	4
Dec. 22	Patrick Bruin.....	Smith Creek, Mich.....	do.....	15
Dec. 23	Albert Decker.....	Deckerville, Mich.....	Berkshire swine.....	1
Dec. 24	Arthur Brewer.....	Millington, Ill.....	Tamworth swine.....	1
Dec. 30	George H. Wardell.....	Kennard, Nebr.....	do.....	3
Dec. 31	David Dunlop.....	Marlette, Mich.....	Berkshire swine.....	1

Cattle, sheep, and swine imported into the United States for breeding purposes through ports along the Canadian border—Continued.

PORT HURON, MICH.—Continued.

Date of inspection.	Name of importer.	Address.	Breed and kind.	Number.
1897.				
Jan. 1	John Marshall	Cass City, Mich	Leicester sheep	1
Jan. 4	Isaac Smith	St. Johns, Mich	Lincoln sheep	2
Jan. 22	S. N. Wescott	Caro, Mich	do	5
Jan. 27	Arthur Broughton	Evansville, Wis	Shropshire sheep	2
Feb. 2	J. C. Poulter	Big Mound, Iowa	do	7
Feb. 3	J. W. Murphy	Cass City, Mich	Oxford sheep	6
Feb. 10	A. E. Geer	Russell, Kans	Yorkshire swine	4
Feb. 17	F. P. Smith	Flint, Mich	Oxford sheep	40
Feb. 23	W. L. Carson	Ramsey, Ill	Lincoln sheep	1
Feb. 25	F. W. Harding	Waukesha, Wis	Shropshire sheep	2
Feb. 25	do	do	Cotswold sheep	120
Feb. 27	do	do	do	23
Mar. 5	Arthur M. Clark	Lexington, Mich	Durham cattle	2
Mar. 12	Norman MacNeill	Grand Blanc, Mich	Oxford sheep	30
Mar. 17	I. G. Robbins	Horace, Ind	Durham cattle	12
Mar. 19	Clay & Forest	Wilbaux, Mont	do	20
Mar. 25	W. O. Yorls	Mound City, Mo	Tamworth swine	1
Mar. 31	A. O. Fox	Oregon, Wis	Shropshire sheep	83
Apr. 1	William Graves	Winden City, Mich	Durham cattle	1
Apr. 14	I. T. McFee	Lenox, Iowa	Shropshire sheep	54
Apr. 15	C. S. Schroeder	West Bend, Wis	Yorkshire swine	1
Apr. 15	Edson Carr	Jonesville, Mich	Shropshire sheep	2
Apr. 25	James J. Hill	Cardigan, Minn	Ayrshire cattle	10
May 1	I. T. McFee	Lenox, Iowa	Durham cattle	1
May 4	C. J. Poulter	Big Mound, Iowa	Shropshire sheep	3
May 4	W. C. Frazier	Atlantic, Iowa	do	2
May 15	Nick Kersch	Carroll, Iowa	Tamworth swine	1
May 20	W. A. Sharp	Roseburg, Mich	Durham cow	1
May 21	M. Hayse	Yale, Mich	do	1
May 27	George McKenow	Pewaukee, Wis	Oxford sheep	73
May 27	do	do	Shropshire sheep	5
June 3	E. H. Spaulding	Westfield, Iowa	Tamworth swine	1
June 8	W. O. Yorls	Mound City, Mo	do	3
June 15	Alex. Gunn	Janesville, Minn	Berkshire swine	1
June 22	A. McLaughlin	Cass City, Mich	Durham cattle	5
June 22	do	do	Leicester sheep	6
June 23	Chris. Kerra	Port Huron, Mich	Durham cattle	2
June 25	F. A. Bywater	Memphis, Mich	Yorkshire swine	7
	Total			2,401
	Cattle			64
	Sheep			2,296
	Swine			41
	Total			2,401

DETROIT, MICH.

1896.				
July 1	George Allen	Allerton, Ill	Southdown sheep	2
July 23	W. T. Donoho	Hartsville, Tenn	Berkshire swine	1
July 23	J. G. Snell	Paris, Ky	Cotswold sheep	5

Cattle, sheep, and swine imported into the United States for breeding purposes through ports along the Canadian border—Continued.

DETROIT, MICH.—Continued.

Date of inspection.	Name of importer.	Address.	Breed and kind.	Number.
1896.				
July 28	M. G. Shaller.....	Beach City, Ohio.....	Cotswold sheep.....	9
July 29	James E. Smith.....	Middlesex, N. Y.....	Leicester sheep.....	1
Aug. 8	D. N. Cherry.....	Xenia, Ohio.....	Cotswold sheep.....	2
Aug. 13	J. M. Garrett.....	Versailles, Ky.....	Shropshire sheep.....	2
Aug. 14	Ed. Morris.....	Glasgow, Ky.....	Berkshire swine.....	4
Aug. 22	D. W. Evans.....	Venedocia, Ohio.....	Shropshire sheep.....	3
Aug. 26	Leonard Byan.....	Bryant, Ind.....	Cotswold sheep.....	1
Sept. 1	T. J. Hiller.....	Orchard Lake, Mich.....	Lincoln sheep.....	10
Sept. 14	John Stephenson.....	Ensley, Mich.....	Leicester sheep.....	1
Sept. 15	James McGregor.....	St. Clair, Mich.....	Yorkshire swine.....	3
Sept. 19	S. H. Todd.....	Wakeman, Ohio.....	Shropshire sheep.....	1
Sept. 30	E. Wineland.....	Avoca, Iowa.....	do.....	1
Oct. 9	G. S. Millard.....	East Claridon, Ohio.....	Cotswold sheep.....	1
Oct. 13	George Capp.....	Saranac, Mich.....	Lincoln sheep.....	1
Oct. 16	John Philpott.....	Otisville, Mich.....	do.....	2
Oct. 17	H. L. Holbrook.....	Laotto, Ind.....	Shropshire sheep.....	2
Oct. 20	E. K. Carr.....	Jonesville, Mich.....	do.....	1
Oct. 27	Frank Bishop.....	Almont, Mich.....	do.....	1
Oct. 28	W. T. Donoho.....	Hartsville, Tenn.....	Berkshire swine.....	1
Nov. 3	W. Coles.....	Chatham, Va.....	Jersey Red swine.....	3
Nov. 10	L. S. Dunham.....	Concord, Mich.....	Shropshire sheep.....	121
Nov. 11	Marvin Fordick.....	Williams, Mich.....	Southdown sheep.....	2
Nov. 13	C. Friend.....	Madisonville, Ky.....	Berkshire swine.....	1
Nov. 21	Allen Bradshaw.....	Ovid, Mich.....	Lincoln sheep.....	4
Nov. 25	William Richardson.....	Campbell, Mich.....	Shropshire sheep.....	1
Dec. 5	L. S. Dunham.....	Concord, Mich.....	do.....	87
Dec. 20	E. C. Wheaton.....	Marshall, Mich.....	Southdown sheep.....	16
1897.				
Jan. 19	J. J. Krass.....	Fremont, Ohio.....	Oxford sheep.....	5
Jan. 19	do.....	do.....	Shropshire sheep.....	13
Jan. 19	do.....	do.....	Cotswold sheep.....	3
Jan. 22	T. M. Rider.....	Fairfield, Iowa.....	Shropshire sheep.....	3
Jan. 23	E. C. Palmer.....	Furnessville, Ind.....	Tamworth swine.....	1
Jan. 23	William Michell.....	Frankford, Ill.....	do.....	3
Feb. 2	W. W. Burns.....	Salem, Ohio.....	Berkshire swine.....	3
Feb. 4	R. T. Tunham.....	Everett, Ill.....	Tamworth swine.....	1
Feb. 13	W. S. Hankshaw.....	Glanworth, Ontario.....	Shropshire sheep.....	43
Feb. 13	R. S. De Lander.....	Wytheville, Va.....	do.....	56
Feb. 19	Chapman Bros.....	South Rockwood, Mich.....	do.....	29
Feb. 23	J. J. Cross.....	Fremont, Ohio.....	do.....	2
Feb. 23	Prof. Craig.....	Madison, Wis.....	do.....	3
Mar. 3	L. S. Dunham.....	Concord, Mich.....	do.....	60
Mar. 11	W. Lambert.....	Reed City, Mich.....	Shorthorn bull.....	1
Mar. 12	D. C. Harter.....	North Manchester, Ind.....	Shropshire sheep.....	6
Apr. 6	J. Russell.....	Denton, Mich.....	Jersey cattle.....	2
Apr. 8	J. Hume.....	Pomona, Cal.....	do.....	3
Apr. 20	W. S. Hankshaw.....	Dublin, Va.....	Shropshire sheep.....	45
May 20	Alex. Dunn.....	Janesville, Minn.....	Shorthorn bull.....	1
June 2	L. S. Dunham.....	Concord, Mich.....	Shropshire sheep.....	105

Cattle, sheep, and swine imported into the United States for breeding purposes through ports along the Canadian border—Continued.

DETROIT, MICH.—Continued.

Date of inspection.	Name of importer.	Address.	Breed and kind.	Number.
1896.				
June 8	F. L. Darling.....	Bluff, Ohio.....	Durham bull.....	1
June 8	do.....	do.....	Durham cow.....	1
	Total.....			684
	Cattle.....			9
	Sheep.....			656
	Swine.....			19
	Total.....			684

BUFFALO, N. Y.

1896.				
Aug. 4	H. U. Noble.....	Brecksville, Ohio.....	Southdown sheep.....	6
Aug. 15	S. V. McDowell.....	Fredonia, Pa.....	Cotswold sheep.....	1
Aug. 17	W. A. McKay.....	Mercer, Pa.....	Leicester sheep.....	1
Aug. 22	C. W. Lewis.....	Hopewell, N. Y.....	Southdown sheep.....	1
Oct. 9	S. M. Harris.....	Coldwater, N. Y.....	Cotswold sheep.....	1
Oct. 9	Thomas Thompson.....	Cherry Creek, N. Y.....	do.....	1
Oct. 13	A. W. Milburn.....	Bell, Ohio.....	Lincoln sheep.....	2
Oct. 20	J. M. Secord.....	Trumansburg, N. Y.....	Southdown sheep.....	1
Oct. 20	Frank Sadler.....	Ravenna, Ohio.....	do.....	3
Oct. 21	A. H. Adams.....	Batavia, N. Y.....	Berkshire swine.....	2
Nov. 10	S. V. McDowell.....	Fredonia, Pa.....	Shropshire sheep.....	2
Nov. 27	H. Chattuck.....	Erie, Pa.....	Dorset sheep.....	5
Dec. 17	E. G. McElhany.....	Burgettstown, Pa.....	Shropshire sheep.....	5
1897.				
Mar. 16	H. W. Ritchey.....	Smicksburg, Pa.....	Yorkshire swine.....	2
Apr. 5	E. S. Ellis.....	Somerville, Mass.....	Shorthorn calf.....	1
Apr. 23	Miller & Sibley.....	Franklin, Pa.....	Jersey cattle.....	6
June 14	Charles Friend.....	Madisonville, Ky.....	Berkshire swine.....	1
June 16	P. D. Riefler.....	Buffalo, N. Y.....	Jersey Red swine.....	5
June 22	A. T. White.....	Hornellsville, N. Y.....	Lincoln sheep.....	9
June 23	Samuel Laundon.....	Elyria, Ohio.....	Durham cattle.....	4
	Total.....			59

SUSPENSION BRIDGE, N. Y.

1896.				
July 1	John Chick.....	Griswold, N. Y.....	Cotswold sheep.....	1
Aug. 5	J. W. Garrett.....	Fort Garrett, Ky.....	Southdown sheep.....	1
Aug. 5	W. & C. Frazee.....	Green Valley, Ill.....	do.....	1
Aug. 6	J. E. Wyler.....	Mount Hope, Ohio.....	do.....	1
Aug. 13	H. W. Chaffee.....	Brecksville, Ohio.....	Shropshire sheep.....	1
Aug. 14	C. E. White.....	Painesville, Ohio.....	do.....	5
Aug. 25	H. W. Keys.....	Newbury, Vt.....	do.....	6
Aug. 27	Watts Bros.....	Xenia, Ohio.....	Cotswold sheep.....	1
Sept. 19	Metcalf Bros.....	Elma, N. Y.....	Berkshire hog.....	1
Sept. 19	Stephen Wilson.....	Avon, Ohio.....	Cotswold sheep.....	1

Cattle, sheep, and swine imported into the United States for breeding purposes through ports along the Canadian border—Continued.

SUSPENSION BRIDGE, N. Y.—Continued.

Date of inspection.	Name of importer.	Address.	Breed and kind.	Number.
1896.				
Oct. 9	S. Shaffer.....	Princeton, Pa.....	Shropshire sheep.....	3
Oct. 27	W. H. Norton.....	Springwater, N. Y.....	do.....	1
Nov. 7	W. V. Hazleton.....	Emeryville, N. Y.....	Southdown sheep.....	1
Dec. 4	Geo. Howatt.....	Kensico, N. Y.....	do.....	1
1897.				
Jan. 7	C. F. Hosford.....	Mexico, N. Y.....	Shropshire sheep.....	3
Jan. 20	P. A. Beardsley.....	Leon, Ohio.....	do.....	1
Feb. 10	J. C. Duncan.....	Lewiston, N. Y.....	do.....	3
Feb. 19	W. H. Wakeman.....	Dalton, N. Y.....	Lincoln sheep.....	4
Apr. 16	James Cloud & Son.....	Kennett Square, Pa.....	Jersey bull calf.....	1
Apr. 27	W. J. Lawrence.....	New York City, N. Y.....	Jersey cow.....	1
June 1	Robert Miller.....	Elks Garden, Va.....	Shropshire sheep.....	10
June 1	H. C. Stuart.....	do.....	Shorthorn cattle.....	5
June 1	Robert Miller.....	do.....	do.....	16
June 1	H. W. Foster.....	Boston, Mass.....	Jersey cow.....	1
June 15	Isaac Norris.....	Bryn Mawr, Pa.....	Jersey bull.....	1
	Total.....			71

OGDENSBURG, N. Y.

1896.				
Dec. 11	M. I. Coyne.....	Chesterville, Ontario.....	Cotswold sheep.....	1

ROUSE POINT, N. Y.

1896.				
Aug. 8	C. F. Boshart.....	Louisville, N. Y.....	Berkshire hog.....	1
Sept. 13	W. Whipple.....	Malone, N. Y.....	Leicester sheep.....	1
Dec. 7	J. F. Amsden.....	do.....	do.....	9
1897.				
Feb. 4	C. E. Colburn.....	Cortlandville, N. Y.....	French Canadian cattle.....	22
Feb. 25	L. L. Moore.....	Not given.....	Cotswold sheep.....	
	Total.....			33

ST. ALBANS, VT.

1896.				
Sept. 18	J. Ballard.....	Georgia, Vt.....	Shropshire sheep.....	2
Sept. 25	George Cossie.....	Barre, Vt.....	do.....	4
Dec. 18	Herbert Dwyer.....	Swanton, Vt.....	do.....	4
	Total.....			10

NEWPORT, VT.

1896.				
Nov. 20	O. V. Rand.....	Gilford, N. H.....	Shropshire sheep.....	3
Dec. 9	S. A. Cleveland.....	Coventry, Vt.....	Southdown sheep.....	1

Cattle, sheep, and swine imported into the United States for breeding purposes through ports along the Canadian border—Continued.

NEWPORT, VT.—Continued.

Date of inspection.	Name of importer.	Address.	Breed and kind.	Number.
1897.				
Jan. 23	Elmer E. Beach.....	Not given.....	Berkshire swine.....	1
Feb. 17	M. W. Cochran.....	do.....	Shropshire sheep.....	2
Mar. 22	L. N. Collier.....	Derby, Vt.....	Durham bull.....	1
June 21	C. M. Chapman.....	Vergennes, Vt.....	Jersey bull.....	1
June 23	C. L. Drown.....	Newport Center, Vt.....	do.....	1
	Total.....			10

RICHFORD, VT.

1896.				
Nov. 18	H. S. Herrick.....	Enosburg Falls, Vt.....	Shropshire sheep.....	13
1897.				
May 11	M. J. Leden.....	East Berkshire, Vt.....	Chester White swine.....	2
	Total.....			15

ISLAND POND, VT.

1896.				
Nov. 11	B. B. Wyman.....	Bryants Pond, Me.....	Shropshire sheep.....	1
1897.				
Jan. 2	John Lodge.....	Manchester, N. H.....	Berkshire swine.....	2
	Total.....			3

BEECHER FALLS, VT.

1897.				
Apr. 8	Thomas Judd.....	Canaan, Vt.....	Cow; breed not given.....	1

HOULTON, ME.

1896.				
Oct. 30	A. P. Dearborn.....	Sherman, Me.....	Shropshire sheep.....	4
1897.				
Apr. 1	E. A. Nickerson.....	Houlton, Me.....	Cotswold sheep.....	3
Apr. 23	J. Thomas.....	do.....	do.....	10
May 23	W. Noble.....	Smyrna, Me.....	do.....	3
	Total.....			20

IMPORTS OF ANIMALS AT QUARANTINE STATIONS.

Imports of live stock received at the animal quarantine stations during fiscal year ended June 30, 1897.

GARFIELD, N. J.

Date of arrival.	Importer.	Address.	Breed.	Number.
1896.				
July 7	Jacob Billman	Sullivan, Ind	Shropshire sheep.....	21
July 29	Dr. G. Howard Davison	Millbrook, N. Y.	do	17
July 29	do	do	Irish goats	19
July 29	do	do	English goats	4
Aug. 4	John Milton	Marshall, Mich	Hampshire sheep	16
Aug. 11	M. C. Campbell	Spring Hill, Tenn	Berkshire swine	7
Aug. 12	Wills A. Seward	Budd Lake, N. J.	Berkshire boar	1
Aug. 12	Robert Hoe	Golden Bridge, N. Y	Berkshire swine	2
Aug. 12	do	do	Hampshire ram	1
Aug. 12	do	do	Southdown sheep	1
Aug. 12	do	do	Yorkshire swine	2
Aug. 13	Metcalf Brothers	East Elma, N. Y	Berkshire swine	13
Aug. 18	do	do	Yorkshire swine	5
Aug. 18	do	do	Berkshire swine	1
Sept. 1	Walter W. Law	New York City, N. Y	Swiss cattle	14
Sept. 15	M. C. Campbell	Spring Hill, Tenn	Berkshire swine	3
Oct. 15	Overton Lea	Nashville, Tenn	Sussex cattle	1
Nov. 18	F. W. Barrett	Wadsworth, N. Y	Southdowns sheep	10
Dec. 23	Glen Walker	Fort Worth, Tex	Berkshire swine	3
1897.				
Feb. 6	J. E. Robbins	Greensburg, Ind	Jersey cattle	10
Mar. 19	J. W. Martin	Richland, Wis	Red Polled cattle	5
Mar. 19	do	do	Hereford cattle	1
Mar. 25	Barnum & Bailey	Bridgeport, Conn	Camels	12
Apr. 15	F. S. Peer	Mount Morris, N. Y	Guernsey cattle	5
Apr. 27	Robert Taylor	Abbott, Nebr	Border Leicester sheep.	49
May 10	Victor Roditi	Coney Island, N. Y	Camels	6
	Total			223

LITTLETON, MASS.

1896.				
July 23	C. I. Hood	Lowell, Mass	Berkshire swine	7
Oct. 4	D. L. Tappan	Arlington, Mass	do	2
Oct. 4	G. F. Churchill	Winthrop, Mass	Jersey cow	1
Dec. 21	C. I. Hood	Lowell, Mass	Berkshire swine	4
1897.				
Apr. 6	J. G. Massey	Rawlins, Wyo	Hampshire Down sheep.	102
	Total			116

ST. DENIS, MD.

1896.				
July 24	Baltimore City Park Board.	Baltimore, Md	Southdown sheep	2

Imports of live stock received at the animal quarantine stations during fiscal year ended June 30, 1897—Continued.

BUFFALO, N. Y.

Date of arrival.	Importer.	Address.	Breed.	Number.
1896.				
Nov. 7	J. W. Wadsworth	Arvon, N. Y.	Canadian cattle	112
1897.				
Feb. 2	Matheson & Co.	Buffalo, N. Y.	Canadian cattle	2
Feb. 2	Rice & Whaley	do	do	6
Feb. 3	Williamson, Ransom & Co.	do	do	1
Feb. 9	Matheson & Co.	do	do	4
Feb. 9	Williamson, Ransom & Co.	do	do	1
Feb. 9	Rice & Whaley	do	do	1
Feb. 16	Kelver & Co.	do	do	2
Feb. 16	Rice & Whaley	do	do	5
Feb. 16	Matheson & Co.	do	do	1
Feb. 16	Williamson, Ransom & Co.	do	do	1
Feb. 18	John Grobe	do	do	4
Feb. 23	Kelver & Co.	do	do	7
Feb. 27	Pfeiffer & Windsor Bros.	do	do	2
Mar. 1	Matheson & Co.	do	do	1
Mar. 2	do	do	do	1
Mar. 3	Rice & Whaley	do	do	1
Mar. 4	Matheson & Co.	do	do	1
Mar. 6	do	do	do	1
Mar. 9	Williamson, Ransom & Co.	do	do	2
Mar. 16	John Grobe	do	do	1
Apr. 28	Miller & Sibley	Franklin, Pa.	Jersey cattle	6
May 25	J. H. Pratt	Buffalo, N. Y.	Grade cattle	2
	Total			165

OGDENSBURG, N. Y.

1896.				
Nov. 24	W. C. Browning	Alexandria Bay, N. Y.	Jersey cattle	2
Dec. 12	do	do	do	1
1897.				
Feb. 8	John Cronk	Ronselaer Falls, N. Y.	Holstein heifer	1
Feb. 13	Wm. Stanton	Popes Mills, N. Y.	Grade cattle	6
Feb. 13	John Cronk	Ronselaer Falls, N. Y.	do	6
Feb. 20	W. I. Dalley	Heuvelton, N. Y.	do	5
Mar. 2	J. B. Humphrey	do	do	28
Mar. 5	D. Murphy	Ogdensburg, N. Y.	do	3
Mar. 15	I. F. Cole	Gouverneur, N. Y.	do	37
Mar. 16	L. McRoberts	Ogdensburg, N. Y.	do	1
Mar. 19	D. Murphy	do	do	2
Mar. 23	W. M. Cosgrove	Redwood, N. Y.	do	37
Apr. 5	Thomas F. Shelly	Ogdensburg, N. Y.	do	1
Apr. 21	S. S. Rodgers	Lisbon, N. Y.	do	6
Apr. 21	Gilbert Nelson	do	do	5
June 17	do	do	Jersey cattle	3
	Total			141

Imports of live stock received at the animal quarantine stations during fiscal year ended June 30, 1897—Continued.

ROUSE POINT, N. Y.

Date of arrival.	Importer.	Address.	Breed.	Number.
1890.				
Sept. 14	S. L. Judd	Georgia, Vt.	Ayrshire cattle	1
1897.				
Feb. 1	F. S. Peer	Mount Morris, N. Y.	Ayrshire cattle	3
	Total			4

PORT HURON, MICH.

1897.				
June 22	A. McLaughlin	Cass City, Mich.	Durham cattle	4
June 22	do	do	Holstein cattle	1
	Total			5

NEWPORT, VT.

1897.				
June 23	C. L. Drown	Newport, Vt.	Durham bull	1

RICHFORD, VT.

1897.				
June 19	Henry Bashaw	Enosburg, Vt.	Jersey cattle	3

HOULTON, ME.

1897.				
Apr. 14	C. Russell	Fort Fairfield, Me.	Jersey cow	1
Apr. 28	J. Thomas	Houlton, Me.	Cotswold sheep	10
June 7	John Gray	do	Jersey cow	1
	Total			12

VANCEBORO, ME.

1890.				
Nov. 16	J. A. Fletcher	Vanceboro, Me.	Jersey cow	1

NUMBER AND VALUE OF FARM ANIMALS, 1870-1896.

The Division of Statistics of the Department of Agriculture has been collecting statistics relating to farm animals since January, 1864, and the results have appeared in the annual reports of the Department and also in the form of bulletins. The numbers and values of farm animals from January 1, 1880, to January 1, 1896, were published as Bulletin No. 11 of the Division of Statistics. In this bulletin the statistician, Mr. Henry A. Robinson, referring to the returns previous to 1880, disavows their accuracy owing to "the defects of the census of 1860, upon which the official estimates for a number of years were

AVERAGE PRICES OF FARM STOCK, 1870 TO 1896, INCLUSIVE.

Table showing the estimated average farm price of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.		Hogs.	Sheep.	Horses.	Mules.
	Milch cows.	Other cattle.				
1870.....						
1871.....	\$31.97	\$19.61	\$4.36	\$2.80	\$73.37	\$94.82
1872.....	29.72	20.06	4.00	2.96	74.21	95.15
1873.....	27.99	19.15	4.36	2.61	71.45	89.22
1874.....	28.52	18.68	5.24	2.79	68.01	80.00
1875.....	28.89	19.04	6.80	2.60	64.96	75.33
1876.....	27.32	17.10	6.09	2.27	60.06	68.91
1877.....	26.41	17.14	4.98	2.25	58.16	63.70
1878.....	21.73	15.39	3.18	2.07	52.41	56.06
1879.....	23.27	16.10	4.28	2.21	54.75	61.26
1880.....	23.95	17.33	4.70	2.30	58.44	60.79
1881.....	25.89	19.89	5.07	2.37	58.53	71.35
1882.....	30.21	21.81	6.75	2.53	70.50	79.49
1883.....	31.37	23.52	5.57	2.37	74.04	84.22
1884.....	39.70	23.25	5.02	2.14	73.70	82.38
1885.....	27.40	21.17	4.26	1.91	71.27	79.60
1886.....	26.06	19.79	4.48	2.01	72.15	78.91
1887.....	24.65	17.79	4.98	2.05	71.82	79.78
1888.....	23.94	17.05	5.79	2.13	71.80	79.49
1889.....	22.14	15.21	4.72	2.27	68.84	78.25
1890.....	21.62	14.76	4.15	2.50	68.00	77.88
1891.....	21.40	15.16	4.60	2.58	65.01	75.55
1892.....	21.75	15.24	6.41	2.66	61.22	70.68
1893.....	21.77	14.66	5.98	1.98	47.83	60.17
1894.....	21.97	14.06	4.97	1.58	36.29	47.55
1895.....	22.55	15.86	4.35	1.70	38.07	45.29
1896.....	23.16	16.65	4.10	1.82	31.51	41.66

based." However, as the estimates are the only figures available and are of some use for comparisons, it has been determined to insert them here. The tables herewith presented are from the published reports of the statistician, and cover the years from 1870 to 1896, inclusive. The Division of Statistics dates its returns January 1 of each year, but as the figures are really for the previous year, the dates in these tables have been changed accordingly. Thus, reports dated January 1, 1871, are here given for 1870.

In all matters pertaining to values previous to 1878 it is well to keep in mind the fact that values are given in currency. The currency equivalent of \$100 in gold for the years 1870 to 1878, inclusive, is as follows: 1870, \$114.9; 1871, \$111.7; 1872, \$112.4; 1873, \$113.8; 1874, \$111.2; 1875, \$114.9; 1876, \$111.5; 1877, \$104.8; 1878, \$100.8.

UNITED STATES.

Table showing the estimated number and value of farm animals for the years 1867 to 1896, inclusive.

[From Report No. 145 of the Statistician, Department of Agriculture.]

Year.	Horses.		Mules.		Milch cows.	
	Number.	Value.	Number.	Value.	Number.	Value.
1867.....	5,753,940	\$432,606,228	855,685	\$68,415,760	8,091,568	\$319,681,153
1868.....	6,382,703	533,024,787	921,662	98,386,359	9,247,714	361,732,676
1869.....	8,248,800	671,319,461	1,179,500	128,584,796	10,065,600	394,940,745
1870.....	8,702,000	683,257,587	1,242,300	126,127,786	10,023,000	374,179,063
1871.....	8,980,900	659,707,916	1,276,300	121,027,316	10,303,500	320,304,983
1872.....	9,222,470	684,463,957	1,310,000	124,658,065	10,575,900	314,358,931
1873.....	9,333,800	668,957,406	1,330,350	119,501,859	10,705,800	296,609,309
1874.....	9,504,200	646,370,039	1,363,750	111,562,713	10,906,800	311,069,824
1875.....	9,735,906	632,446,985	1,414,500	106,565,114	11,085,400	320,348,728
1876.....	10,155,400	610,200,631	1,443,500	99,490,976	11,260,800	307,743,211
1877.....	10,329,700	600,813,681	1,637,500	104,822,939	11,300,100	298,499,866
1878.....	10,938,700	573,254,868	1,713,100	96,033,971	11,823,400	256,953,928
1879.....	11,201,800	613,296,611	1,729,500	105,948,319	12,027,000	279,899,420
1880.....	11,429,626	607,054,325	1,730,721	120,096,164	12,368,053	296,277,060
1881.....	10,521,554	615,824,914	1,825,166	130,945,378	12,611,632	336,490,310
1882.....	10,638,111	765,041,308	1,871,079	148,732,390	13,125,685	396,575,405
1883.....	11,160,663	823,734,400	1,914,126	161,214,978	13,501,206	423,486,649
1884.....	11,564,572	852,282,047	1,972,560	162,497,097	13,904,722	412,903,093
1885.....	12,077,657	860,823,208	2,052,593	163,381,096	14,235,368	389,865,523
1886.....	12,496,744	901,685,755	2,117,141	167,057,538	14,522,083	378,789,539
1887.....	13,172,066	946,096,154	2,191,727	174,853,563	14,856,414	366,232,173
1888.....	13,663,294	962,194,827	2,257,574	179,444,481	15,298,025	366,226,676
1889.....	14,213,837	978,516,562	2,331,027	182,394,099	15,962,863	362,152,133
1890.....	14,056,730	941,823,222	2,296,532	178,847,370	16,019,591	346,297,900
1891.....	15,498,140	1,007,586,636	2,314,099	174,882,070	16,416,351	351,373,122
1892.....	16,206,802	962,225,185	2,381,128	164,763,751	16,424,067	357,299,736
1893.....	16,061,199	799,224,799	2,352,231	146,222,811	16,487,400	358,998,061
1894.....	15,893,318	570,730,580	2,333,108	110,927,834	16,504,629	362,001,729
1895.....	15,124,057	500,140,186	2,278,946	108,204,457	16,137,526	363,955,545
1896.....	14,364,667	452,649,396	2,215,654	92,302,090	15,941,787	369,239,998

UNITED STATES—Continued.

Table showing the estimated number and value of farm animals for the years 1867 to 1896, inclusive—Continued.

Year.	Oxen and other cattle.		Sheep.		Swine.		Total value of farm animals.
	Number.	Value.	Number.	Value.	Number	Value.	
1867	11,942,434	\$249,144,500	38,991,912	\$98,407,809	24,317,268	\$110,768,268	\$1,277,111,822
1868	12,185,385	306,211,473	37,724,279	82,139,979	23,816,470	146,188,755	1,527,704,029
1869	15,386,500	348,926,440	40,863,600	93,364,433	26,751,400	187,191,502	1,822,327,377
1870	16,212,209	369,940,056	31,851,000	74,035,837	29,457,500	182,602,352	1,810,142,711
1871	16,369,800	321,562,028	31,679,390	88,771,197	31,798,300	198,733,928	1,639,211,935
1872	13,413,800	329,268,756	33,022,400	97,322,350	32,632,050	153,729,615	1,684,431,083
1873	16,218,190	316,649,808	33,928,300	88,690,569	30,860,900	134,565,526	1,619,944,152
1874	16,313,400	304,852,859	33,783,600	94,320,652	28,062,200	149,809,234	1,618,012,221
1875	16,785,300	319,023,509	35,895,360	93,686,318	25,726,800	175,070,481	1,647,719,158
1876	17,956,100	307,105,396	35,804,280	86,862,663	28,077,100	171,077,150	1,576,506,063
1877	19,223,300	329,541,708	35,740,500	80,806,002	32,262,500	166,836,532	1,574,620,783
1878	21,466,100	329,513,327	38,123,900	79,022,984	34,766,100	110,613,044	1,445,423,082
1879	21,231,000	341,761,154	40,766,900	90,230,537	34,684,100	145,781,515	1,576,917,536
1880	20,967,702	362,861,508	43,576,899	104,076,759	36,247,663	170,535,435	1,721,795,252
1881	23,280,238	463,069,490	45,916,224	106,594,954	44,122,200	263,543,195	1,908,459,250
1882	28,646,077	611,549,109	49,237,291	124,365,835	43,279,068	291,951,221	2,338,215,288
1883	29,046,101	683,229,664	50,626,626	119,902,706	44,206,863	246,301,139	2,467,868,924
1884	29,836,573	694,382,913	50,830,243	107,960,650	45,142,657	226,401,663	2,450,428,380
1885	31,275,242	601,956,274	48,822,331	92,443,867	46,022,043	193,569,894	2,365,150,822
1886	32,511,750	663,137,926	44,759,314	80,872,830	44,612,836	200,043,291	2,400,586,933
1887	34,378,363	611,750,520	43,544,755	89,279,626	44,346,525	220,811,082	2,409,013,418
1888	35,032,417	597,236,812	42,599,070	90,040,369	50,301,562	291,507,193	2,507,050,058
1889	36,849,024	560,025,137	44,266,072	100,639,781	51,022,780	243,418,336	2,418,706,028
1890	36,875,648	544,127,908	43,431,136	106,307,447	50,625,106	210,193,923	2,329,757,770
1891	37,651,230	578,749,155	44,036,865	116,121,290	52,396,019	241,031,415	2,461,755,698
1892	35,954,196	547,882,204	47,273,553	125,909,264	46,604,807	285,426,462	2,483,506,681
1893	36,608,168	526,789,747	45,948,617	89,186,110	45,206,498	270,384,026	2,170,816,754
1894	34,264,216	482,909,129	42,294,064	66,065,707	44,165,716	219,501,267	1,819,446,236
1895	32,085,400	508,923,416	38,298,763	65,167,735	42,842,750	186,529,745	1,727,020,084
1896	30,508,408	507,929,421	38,818,643	67,620,942	40,600,276	166,272,770	1,655,414,612

ALABAMA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	177,200	\$4,341,400	324,000	\$4,009,266	200,200	\$354,354
1871	180,700	3,402,581	337,900	3,847,542	188,100	342,842
1872	177,000	3,513,450	344,500	4,502,615	186,200	350,265
1873	173,400	3,381,500	334,100	3,812,061	189,900	345,618
1874	169,900	3,034,414	330,700	3,459,122	182,300	322,777
1875	168,200	3,409,414	327,900	4,189,167	183,900	359,737
1876	171,500	3,049,270	330,500	3,291,780	195,100	323,621
1877	205,600	3,485,000	375,000	3,607,500	270,000	472,500
1878	215,200	2,948,240	257,500	2,196,475	204,000	297,840
1879	217,300	2,933,550	267,800	2,075,450	214,200	322,010
1880	215,127	2,996,719	265,122	2,158,003	224,910	375,000
1881	274,157	3,632,580	474,050	4,345,793	354,489	496,285
1882	276,899	4,280,559	484,950	5,077,426	350,944	536,944
1883	279,668	4,617,319	480,100	5,439,533	343,925	512,448
1884	282,465	4,519,440	432,080	4,299,396	343,925	505,570
1885	285,290	4,541,817	432,080	4,384,375	337,047	471,806
1886	288,143	4,797,581	436,411	4,394,325	323,565	458,071
1887	296,787	4,570,520	445,139	4,187,825	310,622	453,135
1888	302,723	5,146,391	454,042	4,370,348	301,308	426,554
1889	311,668	4,928,519	454,042	4,090,682	286,238	413,613
1890	308,687	4,908,123	449,502	4,123,061	274,788	427,873
1891	311,774	4,676,610	445,007	4,006,179	269,292	443,927
1892	314,892	4,487,211	436,107	3,741,453	258,158	542,251
1893	311,743	3,881,500	545,134	3,735,805	343,832	421,067
1894	317,978	3,434,162	545,134	3,738,913	326,640	474,804
1895	508,439	3,365,069	523,329	3,507,352	271,111	311,534
1896	305,355	3,395,548	491,929	3,384,120	252,133	316,074

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	900,000	\$3,870,000	103,600	\$10,291,024	98,700	\$11,540,991
1871	961,000	3,560,460	106,700	9,297,838	101,600	10,752,328
1872	961,900	2,980,080	107,700	9,932,094	103,600	10,575,488
1873	990,100	2,851,488	106,800	7,952,360	102,500	9,363,375
1874	910,800	2,814,372	104,400	7,292,340	102,500	8,320,950
1875	755,900	3,016,041	104,400	7,449,984	101,400	8,132,280
1876	793,600	2,753,792	105,400	6,630,714	102,400	7,122,944
1877	952,300	3,104,498	108,500	6,391,735	105,400	7,035,450
1878	1,095,100	2,606,338	112,800	6,104,736	111,700	6,063,076
1879	1,117,000	3,105,260	113,900	6,450,157	115,100	7,390,571
1880	1,184,000	3,800,640	115,039	6,813,760	118,553	7,806,715
1881	1,189,830	4,818,848	115,069	7,883,596	122,292	8,664,388
1882	1,225,534	5,818,818	116,240	8,127,501	125,961	10,109,630
1883	1,286,811	4,079,191	119,727	8,820,288	127,221	11,732,321
1884	1,351,152	4,590,405	120,924	8,589,232	131,038	11,393,477
1885	1,351,152	4,261,533	123,342	8,731,643	132,348	11,120,818
1886	1,310,617	3,882,703	127,042	8,751,535	134,995	11,194,624
1887	1,376,148	4,061,014	130,853	10,800,825	137,695	11,980,525
1888	1,403,671	5,038,477	133,470	9,919,207	140,449	11,933,953
1889	1,530,001	4,643,552	134,805	9,740,498	143,258	12,456,913
1890	1,514,701	4,338,102	133,457	9,828,362	143,258	12,815,875
1891	1,490,554	4,356,205	121,446	8,485,421	136,095	11,793,744
1892	1,484,558	4,761,719	123,511	8,155,495	135,415	10,920,434
1893	1,514,248	4,968,693	119,806	8,694,130	125,936	8,455,692
1894	1,680,816	5,885,836	123,400	5,769,369	125,936	7,265,473
1895	1,448,898	5,220,452	128,336	5,456,967	127,195	6,705,542
1896	1,885,876	4,763,724	139,619	5,032,297	129,739	6,358,007

ARIZONA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	10,044	\$230,034	145,000	\$2,755,000	602,000	\$1,204,200
1883	13,057	424,352	203,000	4,060,000	812,700	1,625,400
1884	13,188	408,828	217,210	4,561,410	853,335	1,621,337
1885	13,847	429,257	238,031	4,778,620	896,002	1,523,203
1886	15,232	355,963	243,710	4,630,490	627,201	1,003,522
1887	16,298	606,248	420,000	7,560,000	658,561	1,152,482
1888	16,624	374,040	441,000	7,717,500	665,147	1,197,205
1889	16,790	336,800	604,170	9,062,550	698,404	1,152,367
1890	16,790	461,725	725,004	10,150,056	593,643	1,335,607
1891	17,797	441,925	761,254	11,418,810	611,452	1,406,340
1892	16,907	355,047	822,154	12,414,525	580,879	1,306,978
1893	14,878	260,365	649,502	7,306,898	601,246	1,209,681
1894	14,878	334,755	649,502	6,261,204	746,546	901,081
1895	15,622	380,550	636,512	6,457,184	746,540	930,196
1896	16,872	380,464	547,400	6,577,011	828,606	1,301,172

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	9,200	\$73,000	7,704	\$423,720	1,064	\$69,100
1883	9,384	60,066	8,628	401,706	1,075	75,250
1884	9,853	62,074	8,801	457,632	1,129	79,030
1885	10,149	45,671	9,681	513,003	1,242	117,369
1886	13,701	54,804	10,165	528,480	1,863	137,802
1887	16,441	94,530	10,267	503,083	1,863	135,504
1888	16,112	96,672	29,700	1,440,450	2,850	200,213
1889	20,140	90,690	32,070	1,519,155	2,696	206,520
1890	20,140	106,742	31,037	1,396,665	2,065	123,300
1891	20,143	106,756	51,658	2,066,420	1,336	71,816
1892	19,596	122,100	52,175	1,565,250	1,340	67,000
1893	19,596	141,036	52,697	1,146,180	1,327	40,805
1894	20,904	101,696	54,278	1,770,815	1,327	39,940
1895	20,695	152,980	50,440	1,164,770	1,221	33,605
1896	20,076	126,206	52,498	1,133,429	1,026	25,815

NOTE.—Returns from Arizona previous to 1882 were included with Nevada, Colorado, and the Territories.

ARKANSAS.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	132,600	\$2,935,764	221,900	\$2,622,858	135,000	\$312,200
1871	140,500	2,996,865	235,200	2,871,792	147,100	326,550
1872	150,300	3,070,629	251,000	2,961,332	160,300	351,057
1873	151,800	2,694,450	256,000	2,917,542	176,300	345,546
1874	151,800	2,410,364	248,900	2,486,511	183,300	366,270
1875	160,900	2,696,580	261,900	2,775,406	192,400	386,724
1876	165,700	2,535,210	261,300	2,699,229	205,000	357,603
1877	182,300	2,873,304	305,000	4,017,350	235,500	357,250
1878	187,700	2,490,779	357,000	3,430,770	265,000	437,315
1879	199,000	2,718,340	371,300	3,691,224	293,500	457,980
1880	203,900	3,013,338	378,726	3,828,029	296,435	456,724
1881	214,419	4,294,067	445,071	5,181,079	249,225	353,689
1882	217,752	5,544,246	429,465	6,437,027	230,256	430,651
1883	237,752	5,636,486	420,876	5,749,166	227,393	370,498
1884	238,082	5,420,214	429,294	5,421,183	225,020	369,033
1885	276,104	4,984,350	442,173	4,979,796	224,021	367,681
1886	289,900	4,705,223	451,016	4,828,696	224,680	341,933
1887	304,404	4,453,431	469,057	4,903,415	220,167	370,127
1888	322,668	4,531,686	501,891	4,566,705	224,570	324,265
1889	329,121	4,432,628	587,212	5,072,101	269,484	401,900
1890	329,121	4,525,414	704,651	5,961,934	299,484	365,737
1891	342,286	4,706,433	725,794	6,353,236	264,094	396,537
1892	338,863	3,896,025	711,278	5,782,338	240,826	331,714
1893	328,607	3,536,780	654,376	4,593,263	228,310	307,654
1894	328,697	3,316,553	615,113	4,406,364	212,328	298,278
1895	295,827	3,807,200	516,695	4,389,084	188,972	244,682
1896	266,244	3,300,413	418,523	3,377,357	170,075	218,512

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	863,600	\$2,832,608	138,100	\$10,246,638	67,900	\$6,340,269
1871	1,036,300	3,958,666	147,700	11,640,237	76,700	7,467,512
1872	1,067,300	2,753,634	160,900	12,611,342	82,900	7,854,664
1873	960,500	2,823,870	162,500	11,882,000	83,600	7,486,664
1874	883,600	2,155,984	154,300	9,163,877	81,000	5,846,580
1875	901,200	3,523,082	158,900	8,694,901	83,400	5,690,500
1876	1,000,300	3,571,071	162,000	7,769,520	85,900	5,170,321
1877	1,040,300	3,797,085	165,200	7,471,996	85,900	4,965,879
1878	1,123,500	2,696,400	180,300	7,347,225	89,300	4,606,987
1879	1,146,000	3,403,620	191,100	8,653,008	92,900	5,189,394
1880	1,580,500	5,010,185	191,100	9,432,086	97,445	6,513,224
1881	1,471,192	4,413,576	150,723	8,832,366	91,436	6,897,632
1882	1,250,513	4,851,980	156,752	8,928,594	96,008	6,867,594
1883	1,550,636	5,551,277	181,455	9,517,772	102,729	7,102,683
1884	1,659,181	5,574,848	166,290	9,999,550	106,838	7,376,666
1885	1,692,365	4,197,065	169,625	9,258,528	114,317	7,376,394
1886	1,523,129	4,036,293	174,714	10,495,908	117,747	8,566,430
1887	1,538,360	3,938,302	179,955	10,678,480	122,457	9,063,660
1888	1,569,127	4,096,561	187,153	10,790,713	128,580	9,382,065
1889	1,663,275	4,091,657	187,153	10,612,675	129,866	9,042,968
1890	1,679,908	3,672,278	190,896	10,519,001	132,463	8,947,576
1891	1,663,109	3,978,158	187,078	10,359,133	135,112	9,232,333
1892	1,563,322	4,239,967	190,820	9,916,082	137,139	8,871,867
1893	1,547,689	4,961,892	196,545	8,958,806	139,882	8,457,762
1894	1,547,689	3,401,822	218,165	7,156,136	141,281	8,248,502
1895	1,563,166	3,954,809	235,618	7,719,945	145,519	6,313,361
1896	1,375,586	3,196,861	240,330	6,355,207	145,519	4,985,921

CALIFORNIA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	180,800	\$8,660,048	480,000	\$13,190,800	3,636,090	\$9,417,000
1871	186,800	8,342,488	465,500	11,078,900	3,672,300	10,208,994
1872	270,000	11,728,800	442,200	10,042,362	4,002,800	11,888,316
1873	310,500	10,954,440	428,900	7,372,128	4,633,200	10,818,182
1874	340,000	10,044,600	660,000	12,487,200	4,683,200	11,848,498
1875	363,800	11,445,148	1,075,000	21,586,000	6,750,000	13,635,000
1876	381,900	11,701,416	1,053,500	17,403,820	7,290,000	10,206,000
1877	386,500	10,995,585	1,000,800	17,243,784	6,531,000	9,972,720
1878	459,600	11,903,640	1,010,000	19,099,100	6,839,000	11,091,290
1879	473,400	13,562,910	999,900	18,468,153	7,646,800	12,387,816
1880	473,400	14,902,578	999,900	20,347,965	7,493,864	12,739,569
1881	214,280	7,090,956	422,433	9,196,386	6,352,344	10,481,368
1882	214,280	7,750,508	575,000	15,801,000	5,907,680	11,933,514
1883	210,708	8,386,904	609,500	17,766,325	6,203,064	11,785,822
1884	231,743	8,422,106	615,595	18,701,776	5,892,911	11,137,002
1885	236,378	9,159,648	627,907	17,994,159	6,090,698	11,961,298
1886	243,469	8,038,040	659,302	13,607,595	6,090,698	10,728,192
1887	250,773	8,275,509	602,267	14,194,447	5,482,728	10,291,779
1888	258,296	8,105,328	726,880	14,080,181	3,956,000	7,453,104
1889	268,628	7,454,427	697,805	11,719,707	4,035,120	8,409,190
1890	282,059	8,179,711	558,244	9,895,321	3,712,310	8,157,801
1891	290,521	7,729,541	602,904	10,481,663	4,053,541	9,894,211
1892	299,237	8,154,208	916,414	15,690,840	4,124,376	9,559,470
1893	320,161	8,496,937	925,578	14,982,157	3,918,157	7,074,625
1894	330,036	8,082,274	916,322	14,003,785	3,526,341	5,817,052
1895	335,648	7,971,593	888,832	14,057,319	2,982,125	5,493,784
1896	330,002	8,098,281	853,279	14,448,828	2,577,060	4,800,787

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	450,000	\$2,726,460	204,800	\$10,293,248	21,400	\$1,404,696
1871	440,600	2,225,080	202,700	8,835,063	20,500	1,225,080
1872	427,300	2,610,403	250,000	11,037,500	25,000	1,776,500
1873	448,600	2,763,576	222,500	11,039,100	23,000	1,466,020
1874	403,700	2,329,249	230,100	9,574,461	23,200	1,542,568
1875	363,200	2,604,861	209,300	9,514,778	19,400	1,497,680
1876	417,700	2,589,740	260,000	10,270,000	26,500	1,795,375
1877	438,500	2,749,385	282,800	10,750,844	25,400	1,752,092
1878	535,000	3,361,750	273,000	11,998,550	25,700	1,702,368
1879	661,000	2,624,170	273,000	12,607,140	25,700	1,735,778
1880	667,000	3,324,048	281,980	12,698,010	25,700	1,767,903
1881	585,443	3,629,747	240,087	11,356,115	28,910	2,000,572
1882	556,000	6,111,840	240,597	13,204,723	30,086	2,134,085
1883	930,180	5,377,906	252,595	15,491,651	29,765	2,396,558
1884	978,665	5,676,257	265,525	16,457,211	31,551	2,659,749
1885	1,027,586	4,266,586	275,894	17,377,542	31,551	2,450,081
1886	1,017,322	3,841,408	280,626	18,534,948	36,284	3,035,012
1887	1,047,842	4,836,000	307,004	21,737,255	38,821	3,391,389
1888	647,000	3,616,213	368,400	25,857,259	40,765	3,415,201
1889	647,000	3,175,476	327,084	23,094,984	43,808	3,347,406
1890	517,600	2,723,611	360,921	24,262,579	43,659	3,467,093
1891	512,424	2,741,075	415,050	26,010,045	54,574	4,077,548
1892	369,691	2,446,110	518,821	29,821,982	60,031	4,076,180
1893	438,683	2,427,942	513,636	21,562,949	63,033	3,553,890
1894	487,943	2,702,612	513,636	16,404,065	63,033	3,915,041
1895	507,461	2,045,677	482,818	13,114,254	59,251	2,074,789
1896	487,163	2,013,738	439,364	12,037,018	57,473	2,130,320

COLORADO.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877	55,000	\$1,815,000	365,000	\$6,113,750	600,000	\$1,200,000
1878						
1879						
1880						
1881						
1882	39,195	1,531,741	696,000	18,757,200	1,212,000	2,690,640
1883	43,114	1,750,428	772,560	20,449,653	1,248,360	2,696,458
1884	48,719	1,948,760	849,816	22,843,054	1,185,042	2,505,852
1885	51,155	2,080,474	1,019,779	26,211,893	1,126,645	1,991,162
1886	57,294	2,177,172	1,070,768	23,768,479	1,149,178	1,845,579
1887	63,023	2,345,086	1,049,353	20,918,327	1,137,686	2,257,169
1888	64,914	2,233,042	1,025,366	20,562,696	1,114,632	2,508,151
1889	65,563	1,993,115	1,048,933	17,595,648	1,783,491	3,778,281
1890	62,285	1,750,881	1,017,465	16,046,133	1,819,569	4,306,555
1891	60,416	1,570,816	1,037,814	17,112,302	1,710,395	4,263,673
1892	63,437	1,617,644	830,251	14,027,924	1,231,484	3,105,803
1893	76,124	1,755,419	996,301	15,468,276	1,293,658	2,396,295
1894	77,646	1,792,070	926,560	12,379,767	1,305,689	1,984,058
1895	79,975	1,999,375	926,560	15,910,331	1,319,049	2,251,881
1896	82,374	2,150,785	926,560	18,044,569	1,411,382	2,488,390

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877	12,500	\$93,750	50,000	\$2,250,000	5,000	\$22,500
1878						
1879						
1880						
1881						
1882	12,100	140,118	47,700	2,976,003	3,132	363,390
1883	12,342	117,249	94,000	6,193,680	7,200	674,640
1884	14,193	126,743	98,700	5,551,875	7,560	568,663
1885	17,032	125,611	108,570	6,415,942	7,560	607,311
1886	21,290	146,424	123,770	7,178,918	8,165	685,224
1887	23,419	153,103	127,468	7,437,086	8,247	759,697
1888	28,103	207,964	130,033	7,946,430	8,000	762,750
1889	29,608	180,737	137,835	7,631,317	8,000	696,487
1890	23,906	126,353	124,062	6,067,681	4,800	401,616
1891	23,842	131,730	161,298	8,339,086	5,184	413,744
1892	25,511	184,956	185,458	8,169,680	5,236	373,250
1893	26,021	192,424	194,731	5,894,768	9,163	559,563
1894	26,021	151,116	184,994	3,755,659	9,163	518,018
1895	23,419	133,957	164,645	3,618,349	8,888	404,907
1896	22,716	103,131	159,706	3,204,202	8,888	380,454

NOTE.—Returns from Colorado previous to 1877 were included with Nevada, Colorado, and the Territories.

CONNECTICUT.

Table showing estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	110,200	\$5,895,700	128,700	\$5,864,850	81,000	\$229,070
1871	107,000	4,650,490	117,160	4,500,153	79,300	330,401
1872	106,800	4,218,000	111,200	4,521,802	83,200	410,176
1873	106,800	4,539,000	107,800	4,753,680	85,000	375,784
1874	113,300	4,832,884	115,900	5,206,048	88,100	352,400
1875	112,000	4,805,297	114,100	4,185,168	92,500	386,650
1876	112,000	4,269,440	112,900	4,304,714	92,500	393,000
1877	112,000	4,200,000	112,900	4,046,336	92,500	342,250
1878	116,500	3,436,750	120,800	3,635,816	96,200	250,120
1879	118,800	3,489,156	125,600	3,680,130	97,100	300,140
1880	118,800	3,570,356	125,600	2,815,728	98,071	348,152
1881	117,482	3,794,000	118,361	3,718,065	90,025	225,064
1882	121,006	4,200,118	118,167	3,651,604	50,425	225,781
1883	121,006	4,044,621	118,440	3,865,987	58,631	226,489
1884	121,006	4,195,278	108,902	3,745,140	56,419	218,662
1885	123,426	4,063,184	106,724	3,586,535	53,477	173,575
1886	124,680	4,154,918	109,026	3,484,055	53,477	187,474
1887	127,153	4,296,328	109,026	3,454,104	50,190	187,517
1888	130,068	4,519,306	111,025	3,358,237	47,231	183,251
1889	134,897	4,192,569	102,143	2,778,071	46,750	171,056
1890	134,897	4,318,704	101,122	2,806,120	45,824	189,308
1891	136,246	3,970,208	100,111	2,005,812	47,190	192,454
1892	134,884	3,776,752	98,107	2,754,800	42,479	171,743
1893	137,582	3,981,623	76,886	2,125,980	39,930	138,014
1894	137,582	4,042,150	73,442	2,085,801	37,034	123,243
1895	136,206	4,072,550	69,390	1,745,494	34,520	91,862
1896	120,206	3,776,982	66,614	1,686,322	32,104	99,041

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	69,300	\$1,289,375	51,500	\$5,296,775		
1871	65,100	757,113	50,900	4,029,156		
1872	63,700	836,381	50,300	4,974,167		
1873	61,700	824,312	40,700	5,147,429		
1874	60,400	811,776	50,600	5,170,416		
1875	57,900	968,667	51,100	4,197,354		
1876	58,400	919,216	52,100	3,950,743		
1877	59,500	690,200	51,500	3,871,255		
1878	61,300	482,431	53,500	3,156,500		
1879	60,000	535,704	54,000	3,196,800		
1880	60,600	833,250	54,000	3,081,780		
1881	61,788	809,423	45,839	2,860,354	544	\$50,810
1882	62,406	647,774	46,297	3,869,040	544	59,840
1883	62,406	614,075	47,223	4,690,910	555	61,050
1884	62,406	619,088	47,450	4,711,780		
1885	61,782	508,833	47,934	4,777,165		
1886	61,164	538,245	48,413	4,841,242		
1887	61,770	561,543	49,381	4,976,036		
1888	61,776	594,654	50,369	5,216,394		
1889	55,508	509,503	51,376	5,343,490		
1890	55,042	498,128	51,376	5,280,652		
1891	54,402	510,260	46,238	4,722,872		
1892	54,329	551,442	45,313	4,542,619		
1893	53,786	579,686	45,766	4,116,471		
1894	52,172	603,940	43,478	2,660,304		
1895	53,737	480,406	43,913	2,922,361		
1896	53,737	496,900	43,035	2,638,558		

DAKOTA TERRITORY.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	69,750	\$1,873,530	220,000	\$5,827,800	140,000	\$117,200
1883	75,987	2,534,018	270,000	7,222,314	182,000	493,220
1884	108,590	3,149,110	419,430	11,001,649	183,820	439,320
1885	181,345	5,610,814	629,145	14,750,060	253,672	568,220
1886	199,490	5,585,440	710,934	15,859,862	256,209	623,180
1887	223,418	4,841,468	767,800	16,687,171	239,019	700,590
1888	239,057	4,693,596	813,878	16,619,318	242,117	609,747
1889	248,619	4,893,319	822,017	12,980,555	206,329	708,188
1890	211,329	3,856,700	739,815	11,771,792	274,319	866,530
1891						
1892						
1893						
1894						
1895						
1896						

Year.	Hogs.		Horses.		Mules.	
	Number.		Number.		Number.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	109,000	\$965,576	72,000	\$5,272,500	3,520	\$31,156
1883	122,752	894,714	84,240	6,698,765	3,872	390,734
1884	177,960	1,028,782	117,936	8,532,670	4,840	457,623
1885	335,980	1,773,849	206,388	16,069,137	11,616	1,168,247
1886	427,176	2,314,013	227,027	17,618,192	11,964	1,194,622
1887	533,070	3,173,918	247,459	16,858,156	12,323	1,303,340
1888	453,875	3,248,586	264,781	20,659,590	16,850	1,596,324
1889	476,569	2,389,518	296,535	20,067,317	16,082	1,496,401
1890	428,912	2,155,285	237,244	15,480,665	17,016	1,471,919
1891						
1892						
1893						
1894						
1895						
1896						

NOTE.—Returns from Dakota previous to 1882 were included with Nevada, Colorado, and the Territories. The Territory was divided and became the States of North Dakota and South Dakota on November 2, 1882.

DELAWARE.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	26,000	\$910,000	31,909	\$819,830	25,300	\$94,875
1871	26,000	832,000	33,400	606,544	25,300	101,200
1872	26,000	858,000	33,400	965,250	27,300	112,476
1873	24,900	834,150	31,700	710,307	23,200	87,000
1874	22,400	716,800	31,700	673,625	23,200	78,184
1875	23,000	736,000	31,700	793,024	23,600	83,012
1876	23,000	782,000	31,700	812,154	23,600	86,412
1877	23,200	771,200	32,000	800,640	35,000	140,000
1878	23,200	603,200	32,000	754,240	37,400	123,420
1879	24,000	806,000	32,000	961,440	31,800	148,004
1880	25,048	676,104	32,640	658,765	38,800	122,008
1881	27,586	684,411	26,005	555,727	22,077	68,880
1882	27,586	805,805	20,035	737,502	22,077	74,179
1883	27,642	901,175	20,525	863,123	22,077	71,750
1884	28,069	651,367	20,005	823,691	22,519	67,916
1885	28,069	809,372	20,605	758,912	22,294	62,308
1886	28,063	674,352	27,137	722,930	22,294	62,780
1887	28,083	860,400	27,137	750,835	22,294	67,942
1888	28,083	788,783	27,137	703,391	22,294	71,708
1889	28,543	812,433	26,806	665,614	22,517	80,701
1890	28,543	723,804	26,806	568,027	22,967	88,706
1891	31,029	798,765	27,041	651,941	13,551	48,987
1892	31,330	757,246	27,041	625,306	12,873	40,908
1893	33,836	828,082	26,544	462,924	12,873	33,921
1894	33,836	845,000	26,544	410,808	12,358	35,730
1895	34,174	691,046	25,482	509,258	12,358	38,779
1896	34,867	658,568	25,482	538,434		

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	46,000	\$287,500	20,000	\$1,799,800	4,000	\$523,960
1871	46,000	230,000	20,000	1,516,400	4,000	455,960
1872	47,300	271,975	20,000	1,808,200	4,000	461,240
1873	48,300	328,242	20,000	1,743,200	4,000	444,840
1874	48,200	282,134	20,000	1,639,000	4,000	453,480
1875	40,700	405,487	19,600	1,635,020	4,000	380,000
1876	46,700	391,346	19,600	1,505,280	4,000	397,200
1877	47,600	306,520	19,900	1,410,910	4,000	359,040
1878	47,600	244,188	19,900	1,491,903	4,000	337,400
1879	47,600	267,988	20,300	1,507,275	4,000	358,320
1880	47,600	230,344	20,708	1,703,068	4,080	402,370
1881	46,740	451,976	21,999	1,552,020	3,998	345,185
1882	46,740	364,572	21,999	1,876,955	4,001	401,380
1883	45,605	357,279	21,999	2,058,446	4,001	453,313
1884	44,431	364,334	22,100	2,187,022	4,021	456,745
1885	44,431	271,028	22,330	2,172,384	4,061	461,915
1886	42,654	304,977	22,330	2,135,401	4,061	480,130
1887	42,654	290,048	23,000	2,179,250	4,102	470,787
1888	42,654	290,475	23,000	2,162,600	4,184	478,670
1889	51,185	206,873	23,000	2,103,580	4,184	462,269
1890	51,185	282,541	23,000	2,008,300	4,184	464,664
1891	53,232	338,022	25,300	2,144,681	4,812	515,205
1892	52,167	365,167	25,553	2,049,814	4,826	491,549
1893	52,167	198,234	29,386	1,484,924	5,560	480,343
1894	52,167	271,268	29,386	1,203,345	5,217	253,285
1895	52,167	333,867	29,974	1,578,881	5,209	348,140
1896	49,559	287,443	30,274	1,294,516	5,209	314,838

FLORIDA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	73,500	\$1,163,505	412,000	\$3,386,040	30,800	\$40,348
1871	74,200	1,041,026	385,509	3,243,100	29,200	50,516
1872	71,900	1,086,409	383,600	3,425,548	32,900	66,787
1873	69,000	988,080	383,600	3,540,028	31,900	61,567
1874	66,200	904,354	332,900	2,999,650	31,500	61,425
1875	66,800	976,616	363,400	2,958,076	37,800	73,332
1876	67,400	1,019,088	363,400	2,940,296	40,400	81,698
1877	70,700	1,113,525	508,700	4,106,209	56,500	107,350
1878	70,000	883,400	518,900	3,850,238	59,900	116,296
1879	72,900	674,856	518,900	3,154,912	59,900	104,825
1880	65,520	799,999	539,656	4,052,817	70,083	129,634
1881	43,017	531,260	433,700	3,621,395	58,382	101,088
1882	43,447	613,472	560,000	5,101,600	102,000	180,540
1883	46,054	658,572	560,000	5,140,800	98,940	173,145
1884	46,975	689,125	565,000	5,028,184	97,951	172,394
1885	47,015	706,040	565,000	4,070,000	91,064	150,395
1886	49,832	774,888	565,000	4,827,622	90,183	160,866
1887	52,822	862,055	576,912	4,041,078	82,888	182,081
1888	51,407	907,186	582,681	5,236,642	91,859	171,964
1889	51,951	901,186	565,201	5,016,334	110,361	221,065
1890	54,951	906,022	548,245	4,815,620	111,455	233,754
1891	56,600	849,000	553,727	4,694,120	117,028	241,499
1892	57,166	914,656	537,115	4,631,815	106,485	204,471
1893	114,332	1,564,062	375,981	3,111,393	112,885	202,335
1894	114,332	1,591,501	372,221	2,921,965	110,627	172,357
1895	114,332	1,522,902	361,054	2,878,718	101,777	188,573
1896	116,619	1,921,881	353,833	2,408,150	97,706	154,610

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	180,000	\$495,000	16,200	\$1,066,032	9,900	\$986,634
1871	185,400	480,186	16,800	1,571,136	10,400	1,302,704
1872	181,600	490,320	16,800	1,612,632	10,400	1,321,320
1873	183,400	447,496	16,800	1,568,376	10,000	1,183,900
1874	190,700	549,216	16,000	1,590,114	9,800	1,132,672
1875	175,400	396,404	16,700	1,806,274	9,600	679,840
1876	160,000	453,152	16,700	1,218,432	9,100	765,946
1877	160,000	492,100	22,200	1,555,008	11,800	967,128
1878	197,600	561,184	22,400	1,809,504	11,900	799,684
1879	217,300	506,309	22,400	1,821,600	11,900	748,996
1880	202,964	418,085	23,644	1,541,825	12,257	918,540
1881	284,180	662,130	23,768	1,597,210	10,278	732,513
1882	320,000	890,000	24,956	1,876,601	10,586	1,040,710
1883	313,600	671,104	27,202	2,320,331	11,221	1,094,721
1884	307,328	835,932	28,562	2,522,596	11,558	1,160,076
1885	298,108	708,498	29,419	2,947,183	11,558	1,123,596
1886	298,108	729,768	31,184	2,545,222	11,789	1,107,284
1887	307,051	628,840	32,743	2,047,901	12,496	1,190,695
1888	325,474	819,675	33,725	2,800,730	12,871	1,267,688
1889	358,021	867,414	34,737	2,741,986	13,000	1,255,604
1890	361,001	795,521	34,737	2,480,361	12,350	1,191,894
1891	386,913	893,710	32,653	2,207,111	10,498	942,127
1892	388,074	972,514	32,816	2,241,349	10,456	959,850
1893	388,074	924,548	33,144	2,200,074	8,365	724,721
1894	376,432	839,723	34,138	1,916,484	8,114	591,355
1895	395,254	855,013	35,162	1,781,225	8,357	543,916
1896	415,017	837,504	36,865	1,581,331	8,273	492,064

GEORGIA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.	Number.	Value.
1870	252,500	\$5,456,525	409,500	\$4,422,000	209,500	\$444,675
1871	280,000	5,410,600	401,300	4,105,299	258,700	395,811
1872	257,400	5,644,782	401,300	4,410,287	233,500	410,670
1873	257,400	4,773,196	405,300	3,988,152	235,700	374,763
1874	257,400	4,851,990	383,100	3,765,898	375,000	697,500
1875	265,100	4,512,002	400,900	3,572,019	371,200	642,176
1876	270,400	4,510,272	404,900	3,765,570	378,600	617,118
1877	273,100	4,309,600	404,900	3,603,610	382,300	600,211
1878	273,100	3,817,938	404,900	3,174,416	374,400	572,832
1879	273,100	3,621,306	400,800	3,178,344	374,400	530,136
1880	273,100	4,022,763	408,816	3,262,352	378,144	578,500
1881	318,224	4,805,182	507,812	6,025,945	538,141	780,304
1882	321,406	5,521,755	508,834	6,042,235	532,760	847,088
1883	311,048	6,483,554	610,811	7,177,020	543,415	815,122
1884	344,458	6,028,015	610,811	6,566,218	532,547	793,495
1885	341,013	6,257,589	610,811	6,063,141	500,594	770,808
1886	337,605	5,941,813	604,703	5,975,851	465,552	656,780
1887	337,603	5,739,251	598,656	6,588,930	442,274	664,826
1888	340,979	5,898,037	586,083	6,911,890	424,583	626,005
1889	354,618	6,113,614	580,816	6,408,205	411,846	640,173
1890	351,072	6,354,403	569,200	5,618,573	383,017	658,023
1891	354,583	6,382,494	569,200	5,613,450	383,017	673,956
1892	347,401	6,289,587	552,124	5,210,890	432,809	765,206
1893	312,742	5,141,478	557,645	5,350,208	411,169	646,687
1894	309,615	4,811,417	557,645	4,505,280	402,948	537,530
1895	312,711	5,300,451	540,916	4,921,036	378,760	519,368
1896	306,457	5,212,834	513,870	4,347,050	344,080	503,646

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	1,428,900	\$6,630,006	112,800	\$12,312,120	88,300	\$11,623,812
1871	1,528,900	5,075,948	115,000	11,192,950	90,900	11,088,891
1872	1,559,400	4,678,200	117,300	12,293,040	92,700	11,734,893
1873	1,497,000	4,356,270	116,100	11,037,627	92,700	10,553,805
1874	1,511,000	5,584,030	117,200	10,648,792	91,700	9,964,122
1875	1,390,700	5,320,337	118,300	9,380,471	96,200	8,380,944
1876	1,483,100	5,324,329	118,300	8,581,482	98,200	8,016,346
1877	1,586,900	5,250,901	118,300	8,372,061	98,200	7,581,522
1878	1,620,000	4,746,600	119,200	7,343,912	97,200	6,984,792
1879	1,084,900	5,200,272	119,200	8,057,920	98,200	7,520,156
1880	1,701,040	5,036,854	121,584	8,751,616	99,182	8,934,315
1881	1,420,873	4,938,148	98,717	7,117,496	123,003	10,803,834
1882	1,412,604	5,706,920	99,704	7,594,454	123,003	12,947,842
1883	1,582,116	5,806,366	102,205	8,604,377	139,653	13,490,480
1884	1,597,937	5,528,862	105,776	8,736,040	143,843	13,754,268
1885	1,565,978	4,930,950	106,834	8,715,984	143,843	13,890,850
1886	1,518,969	4,405,098	107,002	8,757,335	146,720	13,980,552
1887	1,534,189	4,859,083	110,000	9,203,399	143,654	14,407,417
1888	1,549,531	5,827,476	112,261	9,545,203	152,647	14,928,033
1889	1,627,008	5,379,540	115,629	9,582,125	155,700	15,119,264
1890	1,610,738	4,983,651	112,180	9,403,231	157,257	15,092,208
1891	1,691,275	5,082,832	104,300	8,450,807	157,257	14,916,950
1892	1,674,382	5,891,744	104,935	8,562,208	158,043	14,710,547
1893	1,791,567	7,454,352	105,984	7,780,080	161,204	14,240,462
1894	1,934,892	6,885,119	107,044	5,458,470	161,204	10,470,828
1895	1,954,241	6,031,302	109,185	5,775,850	166,040	11,207,998
1896	2,012,888	6,373,544	110,277	5,331,018	164,380	10,343,608

IDAHO.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	15,400	\$554,400	195,000	\$1,875,000	125,000	\$225,000
1883	15,802	594,825	204,750	5,323,500	187,500	468,750
1884	20,021	824,840	229,178	6,025,806	191,250	429,875
1885	22,271	779,485	290,131	6,382,882	210,375	441,788
1886	24,498	857,430	330,453	7,298,240	231,413	530,679
1887	26,458	705,035	424,816	7,955,925	312,408	640,436
1888	31,750	1,089,978	415,830	8,316,000	374,890	899,738
1889	31,750	952,500	374,247	6,175,076	487,357	1,072,185
1890	32,068	929,972	381,732	5,439,581	501,978	1,154,549
1891	32,700	883,143	515,398	7,858,905	527,077	1,264,985
1892	30,419	780,475	417,424	6,470,072	764,262	1,910,656
1893	30,419	659,180	429,947	5,374,338	779,547	1,753,961
1894	29,202	584,040	399,851	5,431,979	919,865	1,299,770
1895	28,034	567,680	395,852	5,583,492	1,011,852	2,281,728
1896	28,595	600,544	387,935	5,846,170	1,376,119	2,364,263
Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	23,600	\$259,600	28,400	\$1,704,000	780	\$54,000
1883	24,790	227,976	29,252	1,638,112	796	57,312
1884	26,762	240,858	29,545	1,669,393	955	74,400
1885	26,762	149,867	44,318	2,659,180	1,388	207,756
1886	28,100	147,525	48,750	2,681,250	2,436	210,714
1887	42,150	232,900	102,375	5,118,750	1,705	110,625
1888	46,000	487,500	136,500	6,483,750	1,671	102,183
1889	31,000	155,000	137,895	5,790,730	1,704	98,633
1890	34,100	238,700	89,612	3,584,480	1,736	98,633
1891	64,790	469,728	185,497	3,492,395	1,043	46,935
1892	57,015	527,613	192,817	6,945,012	1,053	45,393
1893	58,725	478,099	144,698	6,945,024	990	29,622
1894	64,598	332,381	137,454	2,663,482	990	30,014
1895	77,518	396,250	134,705	3,328,570	941	14,673
1896	75,192	277,721	132,011	2,259,570		

NOTE.—Returns from Idaho previous to 1882 were included with Nevada, Colorado, and the Territories.

ILLINOIS.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870.....	683,400	\$25,750,512	1,224,000	\$31,848,480	1,424,000	\$2,819,520
1871.....	697,000	25,537,680	1,236,300	27,913,386	1,367,000	3,636,220
1872.....	710,900	21,646,906	1,260,900	30,122,901	1,394,300	4,461,760
1873.....	725,100	21,774,753	1,273,500	30,602,306	1,408,200	3,562,746
1874.....	725,100	20,730,000	1,300,000	28,630,000	1,380,000	3,588,000
1875.....	717,800	20,852,080	1,287,000	27,721,980	1,311,000	3,159,510
1876.....	724,900	20,202,963	1,287,000	27,284,400	1,258,500	3,146,250
1877.....	688,000	19,122,422	1,274,100	27,991,977	1,258,500	3,121,080
1878.....	702,400	16,625,808	1,223,100	23,128,821	1,089,000	2,308,680
1879.....	695,400	18,518,502	1,235,900	26,052,477	1,110,800	2,888,080
1880.....	709,308	19,051,025	1,222,947	28,812,631	1,155,252	3,350,173
1881.....	874,572	25,712,417	1,442,489	38,240,383	1,026,702	2,926,101
1882.....	887,318	29,158,327	1,428,064	36,101,174	1,149,906	3,300,230
1883.....	900,984	31,534,440	1,442,944	40,443,326	1,126,908	3,008,844
1884.....	919,004	32,066,479	1,471,191	42,179,040	1,083,101	2,634,373
1885.....	928,194	29,903,065	1,485,908	38,699,757	1,005,653	2,206,196
1886.....	937,476	27,496,171	1,500,762	37,918,350	925,201	2,200,350
1887.....	937,476	24,843,114	1,485,754	33,029,792	814,177	2,026,894
1888.....	974,975	24,560,370	1,530,327	32,398,551	773,468	2,065,160
1889.....	1,072,473	24,259,339	1,713,966	32,076,531	688,387	2,080,257
1890.....	1,053,922	24,066,284	1,725,385	31,628,232	770,983	2,456,769
1891.....	1,104,861	24,561,000	1,747,731	32,962,610	848,082	3,025,314
1892.....	1,063,512	25,157,076	1,538,003	30,630,795	1,167,329	4,397,906
1893.....	1,039,121	26,102,730	1,553,383	28,064,266	1,032,976	2,450,632
1894.....	1,028,730	26,633,820	1,522,315	29,732,644	857,370	1,747,835
1895.....	1,018,443	27,906,445	1,430,976	29,214,530	604,470	1,670,667
1896.....	1,008,259	28,736,382	1,330,806	31,264,393	604,189	1,725,564

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870.....	3,363,000	\$25,289,760	1,008,800	\$70,878,288	98,900	\$3,233,042
1871.....	3,598,400	16,912,480	1,029,900	67,711,900	98,000	7,613,047
1872.....	3,708,300	15,937,680	1,049,400	69,585,714	98,800	7,778,524
1873.....	3,409,700	17,764,537	1,069,800	68,067,932	96,800	7,579,094
1874.....	3,034,600	19,148,326	1,070,300	67,022,196	110,000	8,010,200
1875.....	2,640,100	22,784,963	1,091,700	65,229,075	111,100	7,929,207
1876.....	2,750,000	22,000,000	1,102,600	64,634,412	113,300	7,713,461
1877.....	2,900,000	17,081,000	1,091,500	59,857,860	136,000	8,754,720
1878.....	3,336,000	11,042,160	1,108,000	51,150,000	138,800	7,391,940
1879.....	3,202,600	17,966,586	1,078,000	55,699,480	133,900	8,119,660
1880.....	3,202,000	18,763,720	1,067,220	62,435,731	124,627	8,431,214
1881.....	4,136,213	29,367,112	1,012,851	59,353,060	112,045	8,504,586
1882.....	3,970,764	29,621,869	1,017,915	76,730,433	123,265	10,187,852
1883.....	4,010,472	27,231,105	1,028,094	79,502,500	123,265	10,632,830
1884.....	4,090,681	21,435,168	1,038,375	78,449,231	125,730	10,649,331
1885.....	3,967,961	18,897,017	1,048,759	78,872,127	124,473	10,250,734
1886.....	3,650,624	19,997,572	1,059,247	81,152,417	125,118	10,470,670
1887.....	3,102,945	20,688,468	1,069,839	82,649,667	115,661	9,684,515
1888.....	5,275,000	39,317,740	1,091,236	85,529,225	112,191	9,187,623
1889.....	5,433,250	30,517,479	1,123,973	93,301,912	109,947	8,698,030
1890.....	4,944,250	24,002,627	1,193,973	79,214,809	94,554	7,182,702
1891.....	4,894,815	26,582,760	1,237,528	91,872,771	106,846	7,733,399
1892.....	3,720,059	30,281,284	1,377,654	89,582,790	105,778	7,200,669
1893.....	3,422,454	23,968,064	1,308,771	56,799,353	104,720	5,367,573
1894.....	3,148,658	19,617,368	1,295,683	44,393,902	103,673	4,083,286
1895.....	2,382,980	12,301,830	1,179,072	34,502,959	97,643	3,531,725
1896.....	2,249,401	11,651,896	1,072,956	33,166,042	90,631	3,234,290

INDIANA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	435,500	\$16,786,750	750,000	\$19,630,000	2,100,000	\$3,822,000
1871	444,200	14,911,794	750,000	16,695,000	1,935,000	4,990,630
1872	453,000	13,920,690	765,000	18,944,700	1,913,900	5,416,537
1873	448,400	13,231,608	780,300	16,128,801	1,722,500	4,564,625
1874	448,400	11,810,856	788,100	15,722,585	1,300,000	3,155,000
1875	434,900	11,916,290	772,300	15,175,085	1,250,000	2,629,250
1876	439,200	11,736,640	764,500	13,546,940	1,175,000	2,339,573
1877	439,200	11,726,640	766,800	13,735,620	1,092,700	2,339,573
1878	439,200	10,365,120	780,000	13,587,000	1,030,500	2,339,573
1879	434,800	10,909,132	756,600	14,110,590	1,019,000	2,339,573
1880	439,148	10,751,735	764,166	14,542,079	1,029,570	2,339,573
1881	439,995	13,088,167	851,440	19,838,552	1,111,516	2,945,517
1882	409,795	15,788,532	842,626	21,739,062	1,122,631	3,177,043
1883	504,793	17,687,755	851,355	22,858,862	1,145,084	3,217,998
1884	530,033	17,671,300	876,396	24,623,240	1,122,182	2,670,793
1885	540,634	16,219,020	885,065	22,511,670	1,038,517	2,288,607
1886	551,447	15,098,619	909,578	21,831,037	1,034,001	2,567,131
1887	556,981	15,458,608	894,244	20,066,941	1,033,068	2,553,611
1888	573,670	14,628,585	912,231	19,582,493	1,423,000	3,865,692
1889	602,354	12,938,564	857,543	18,027,577	1,278,000	3,622,821
1890	608,378	13,080,127	1,053,627	19,041,149	1,139,200	4,114,151
1891	657,048	15,276,366	1,085,236	20,925,520	1,161,702	4,298,762
1892	683,618	16,258,641	1,063,531	21,436,952	1,080,383	4,145,430
1893	656,982	15,872,685	904,001	18,178,747	972,345	2,265,634
1894	650,412	16,082,656	867,841	17,211,372	836,217	1,581,044
1895	637,404	15,743,879	798,414	16,447,070	727,509	1,069,779
1896	618,282	14,686,649	726,557	15,317,115	654,758	1,771,579

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	2,349,000	\$14,187,980	650,000	\$47,047,000	35,700	\$2,653,581
1871	2,489,900	12,275,207	663,000	44,275,140	35,300	2,423,698
1872	2,713,900	9,797,179	669,000	45,385,488	35,000	2,583,848
1873	2,490,700	10,985,480	649,500	42,444,825	58,500	3,996,135
1874	2,670,000	14,898,600	662,400	42,466,464	59,000	3,814,350
1875	2,136,000	16,447,200	675,000	41,725,056	58,400	4,187,864
1876	2,375,000	15,556,250	675,800	36,982,944	60,100	3,839,189
1877	2,422,500	12,548,550	668,800	34,255,936	63,100	3,836,480
1878	2,325,600	6,907,082	688,800	33,386,126	61,200	3,129,156
1879	2,186,000	10,274,200	688,800	37,608,480	58,800	3,570,336
1880	2,186,000	11,432,780	702,576	38,490,688	54,694	3,427,433
1881	2,867,772	19,500,850	587,258	33,045,008	61,521	3,410,660
1882	2,724,383	20,814,286	593,131	43,209,593	51,779	4,233,969
1883	2,642,652	16,252,310	593,131	45,748,194	52,815	4,532,665
1884	2,801,211	15,770,818	616,856	47,695,006	54,399	4,658,186
1885	2,773,199	12,936,420	635,362	47,950,766	54,943	4,503,888
1886	2,495,879	13,896,880	635,362	49,243,727	53,844	4,495,201
1887	2,371,085	14,082,349	641,716	52,030,460	54,382	4,585,456
1888	2,371,085	16,343,416	618,133	52,917,495	53,294	4,415,783
1889	2,845,312	15,435,196	667,577	52,677,062	53,827	4,310,109
1890	2,504,772	12,191,823	647,550	50,735,543	51,674	4,092,736
1891	2,580,380	12,787,081	725,256	55,368,703	56,841	4,362,014
1892	2,017,376	15,493,446	747,014	52,470,278	56,557	3,989,497
1893	1,815,658	12,033,324	761,954	38,331,935	57,688	3,241,815
1894	1,779,325	10,720,739	746,715	29,184,776	54,227	2,335,541
1895	1,654,772	7,802,780	694,445	23,732,946	50,431	1,904,802
1896	1,340,365	6,762,409	645,634	20,547,082	46,397	1,674,144

IOWA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	465,300	\$15,964,443	814,900	\$19,568,345	1,822,700	\$3,116,817
1871	511,800	14,581,182	871,900	18,663,536	1,822,700	4,009,940
1872	537,300	15,130,368	820,000	19,196,200	1,768,000	4,278,560
1873	569,500	15,001,750	852,800	18,915,104	1,732,600	4,123,688
1874	592,200	15,693,300	869,800	18,648,512	1,697,000	4,312,666
1875	621,800	16,726,420	913,200	19,095,012	1,663,900	4,425,874
1876	665,300	15,674,468	958,800	17,085,816	1,680,500	3,848,345
1877	632,000	15,515,600	1,054,600	20,522,516	500,000	1,288,000
1878	676,200	14,294,868	1,356,800	23,038,464	445,500	889,010
1879	724,500	17,532,900	1,370,400	26,640,576	454,400	1,154,176
1880	782,460	20,891,082	1,411,512	30,700,396	463,488	1,344,115
1881	905,438	21,971,980	1,775,427	40,657,278	482,681	1,361,180
1882	1,014,091	31,284,707	1,917,461	47,476,334	497,161	1,401,994
1883	1,085,077	34,451,185	1,935,810	50,851,060	497,161	1,382,108
1884	1,150,182	34,505,460	2,014,464	52,839,915	472,908	1,171,311
1885	1,230,695	35,444,016	2,074,919	50,332,980	467,580	1,067,204
1886	1,243,002	32,541,762	1,116,417	47,369,232	425,498	1,029,515
1887	1,255,432	29,251,566	995,253	42,635,705	408,478	985,249
1888	1,253,065	28,861,890	995,253	42,865,631	540,700	1,322,552
1889	1,331,888	26,338,064	577,161	46,455,569	475,816	1,339,282
1890	1,278,612	23,973,975	680,247	47,038,341	452,025	1,430,594
1891	1,304,184	24,470,534	707,049	50,732,332	565,031	1,663,084
1892	1,291,142	27,113,082	704,342	52,513,344	791,034	2,047,735
1893	1,278,231	30,127,905	731,385	54,064,497	775,222	2,004,724
1894	1,227,102	35,450,977	740,188	57,806,437	627,930	1,282,028
1895	1,202,560	31,001,997	736,973	50,159,389	565,137	1,366,279
1896	1,190,534	33,501,627	719,755	54,901,306	563,834	1,672,578

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	3,100,000	\$22,105,000	570,400	\$40,583,960	34,400	\$2,863,456
1871	3,596,000	17,116,960	616,000	40,662,180	36,700	2,659,650
1872	3,847,700	17,199,219	634,400	40,506,440	36,400	2,654,652
1873	3,693,700	17,803,634	647,000	42,921,980	35,300	2,611,494
1874	3,398,200	23,039,706	647,000	41,692,689	36,000	2,665,320
1875	3,296,200	26,633,206	685,800	43,774,614	37,000	3,041,770
1876	3,263,200	23,738,728	726,900	42,632,685	37,000	2,861,430
1877	2,950,000	15,939,000	734,100	41,351,853	41,400	2,931,634
1878	2,915,000	9,532,050	770,700	39,244,044	43,400	2,865,702
1879	2,778,400	14,892,224	778,400	42,959,896	44,700	3,166,995
1880	2,778,400	16,587,048	809,536	51,526,966	45,564	3,610,589
1881	5,551,571	39,138,576	816,092	48,271,842	45,312	3,277,870
1882	5,107,445	40,981,709	856,897	63,401,809	47,124	4,310,067
1883	4,800,998	30,630,367	891,173	68,602,498	48,066	4,410,785
1884	4,806,698	26,741,559	917,908	68,246,160	49,027	4,395,761
1885	4,849,008	24,596,107	945,445	68,245,526	48,537	4,178,575
1886	4,461,067	23,065,603	973,808	71,026,052	48,062	4,186,822
1887	4,148,811	27,969,624	1,003,002	74,032,062	45,049	3,936,540
1888	6,750,000	50,922,000	1,053,173	78,975,356	47,018	4,003,124
1889	5,805,000	34,481,700	1,095,300	79,029,009	42,310	3,341,085
1890	5,921,100	29,475,236	1,095,300	76,728,750	42,739	3,322,618
1891	7,105,320	41,645,703	1,314,360	86,921,929	41,029	2,995,568
1892	6,181,628	54,348,874	1,353,791	83,041,533	40,206	2,689,972
1893	5,996,179	49,403,718	1,307,329	59,792,200	36,187	1,938,145
1894	5,516,485	36,252,134	1,296,963	39,945,828	35,463	1,432,749
1895	4,854,507	27,462,917	1,182,056	34,032,583	34,044	1,230,083
1896	3,737,970	21,182,380	1,067,492	31,460,631	33,704	1,195,015

KANSAS.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	162,000	\$6,230,520	345,800	\$9,967,104	115,000	\$290,950
1871	191,100	5,880,147	397,400	8,333,478	116,100	271,674
1872	214,000	6,193,160	457,000	9,350,220	123,000	301,560
1873	231,100	5,846,830	507,200	9,586,060	141,000	290,420
1874	235,700	4,867,205	476,700	7,941,822	118,000	279,080
1875	235,700	5,600,232	486,200	9,213,490	123,900	346,820
1876	273,400	6,359,284	555,000	8,972,250	142,400	343,184
1877	265,000	6,275,200	535,500	10,249,470	156,600	361,746
1878	321,900	7,023,858	578,300	10,001,335	312,500	706,375
1879	351,400	8,321,152	647,700	13,161,204	371,900	829,337
1880	375,908	9,956,427	667,131	13,802,940	449,999	1,187,907
1881	447,616	11,915,538	1,094,687	24,258,264	649,572	1,623,930
1882	487,901	15,027,351	1,280,000	31,577,000	747,008	1,732,819
1883	526,933	17,704,949	1,395,200	37,837,824	821,709	1,889,931
1884	537,472	16,681,632	1,423,104	36,730,314	838,143	1,617,616
1885	575,095	16,387,204	1,494,259	34,273,065	1,190,163	1,896,667
1886	609,601	16,014,218	1,583,915	35,501,864	1,106,852	1,539,736
1887	640,081	14,444,215	1,583,915	32,271,946	830,139	1,457,558
1888	652,883	13,222,698	1,663,111	30,361,088	730,522	1,297,115
1889	750,815	14,032,732	1,829,422	30,563,967	438,313	870,271
1890	758,323	13,877,811	1,020,883	32,168,437	447,079	1,007,046
1891	773,489	14,232,108	1,978,520	33,207,232	489,433	1,096,565
1892	727,080	13,450,980	1,958,735	31,772,640	389,629	974,053
1893	668,914	12,140,780	1,978,322	32,713,134	323,392	636,799
1894	642,157	12,336,836	1,830,539	31,122,160	274,883	493,888
1895	622,892	13,778,371	1,766,245	33,903,004	258,390	413,966
1896	629,121	15,413,464	1,801,570	30,133,849	222,215	398,965

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	304,800	\$2,706,624	156,000	\$11,255,400	14,900	\$1,372,886
1871	381,000	2,089,310	180,900	10,656,819	16,300	1,247,276
1872	457,200	2,423,160	198,900	10,561,580	17,400	1,184,418
1873	481,000	2,485,998	220,700	11,677,237	19,100	1,276,450
1874	232,600	858,394	220,700	9,757,147	19,600	1,172,864
1875	246,500	2,196,315	227,900	11,280,899	20,700	1,363,080
1876	359,860	2,849,616	234,100	11,777,571	26,200	1,713,742
1877	431,700	2,572,132	236,400	12,136,776	27,500	1,797,125
1878	1,089,000	3,209,670	275,000	13,730,750	50,000	3,162,000
1879	1,208,700	6,381,436	290,700	14,571,414	57,000	3,592,149
1880	1,785,000	10,834,350	328,673	15,997,177	58,710	3,736,832
1881	1,787,939	10,996,069	461,070	23,625,227	68,761	4,498,939
1882	1,984,645	17,098,416	498,734	29,920,235	70,824	5,816,067
1883	2,103,725	14,789,187	522,945	37,950,119	75,073	6,872,933
1884	2,208,911	13,673,159	533,404	39,727,930	75,824	6,937,836
1885	2,275,178	11,059,640	549,406	38,446,250	79,615	7,136,922
1886	2,161,419	11,955,240	593,338	42,263,123	83,596	7,320,901
1887	2,377,561	13,457,489	634,893	42,754,975	86,104	7,173,834
1888	2,734,195	14,636,148	660,289	43,223,153	86,104	6,916,125
1889	2,731,165	15,256,810	728,818	46,117,430	94,714	7,185,907
1890	3,144,324	12,516,235	748,108	43,588,517	89,973	6,530,343
1891	3,175,767	15,128,718	935,135	55,944,137	92,677	6,658,889
1892	2,445,341	18,329,687	1,000,594	55,626,945	92,392	6,186,220
1893	2,249,714	15,364,673	930,594	38,421,970	97,019	5,182,020
1894	1,822,298	9,860,473	912,641	25,066,777	84,108	3,533,146
1895	1,676,487	8,498,279	857,789	20,609,087	87,520	2,845,965
1896	1,659,722	7,648,165	797,744	18,780,168	82,269	2,533,460

KENTUCKY.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	227,200	\$8,665,408	400,400	\$12,452,440	904,300	\$2,287,879
1871	229,400	7,457,784	400,400	10,406,306	884,100	2,205,741
1872	229,400	6,911,822	384,300	9,230,886	824,600	2,383,064
1873	229,400	6,069,824	380,400	8,578,080	808,100	2,068,736
1874	222,500	5,894,025	357,500	8,029,450	759,600	2,187,648
1875	244,700	6,836,918	389,800	8,236,144	683,600	1,948,280
1876	247,100	7,210,878	377,900	8,113,513	680,400	1,928,216
1877	252,000	7,134,120	400,000	9,077,400	600,000	2,673,000
1878	257,200	5,642,988	485,000	8,305,350	1,020,000	2,069,400
1879	270,000	6,107,400	480,700	8,776,335	1,009,800	2,554,794
1880	270,000	6,906,600	419,237	8,289,315	1,020,966	2,879,208
1881	295,845	7,691,970	509,397	11,792,541	990,266	2,822,258
1882	304,720	9,217,780	503,927	12,441,958	1,000,180	2,650,448
1883	304,720	9,836,802	498,888	13,794,253	980,166	2,577,837
1884	304,720	10,119,750	503,877	13,554,291	950,761	2,529,024
1885	307,707	8,780,593	529,071	11,298,055	903,223	2,024,665
1886	310,845	8,464,309	534,362	12,727,433	858,062	1,997,589
1887	313,953	7,629,058	520,018	11,237,676	797,998	1,936,741
1888	313,953	7,534,872	529,018	10,650,723	805,973	2,038,318
1889	317,063	6,877,747	523,728	9,293,546	805,978	2,198,708
1890	317,063	6,658,953	478,592	7,074,899	765,670	2,399,485
1891	320,264	6,965,742	467,060	7,923,896	773,336	2,450,889
1892	313,850	6,747,969	443,707	7,829,335	1,237,338	2,075,782
1893	320,552	6,719,565	509,004	9,417,507	1,163,088	2,797,483
1894	319,665	6,038,472	551,084	8,428,502	1,046,718	1,934,046
1895	303,682	6,180,003	506,997	8,786,680	958,360	1,003,257
1896	285,481	5,646,419	481,367	8,168,601	738,195	1,406,229

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	1,994,100	\$9,591,621	327,400	\$24,571,370	85,500	\$7,073,415
1871	2,113,700	7,069,758	337,200	23,573,652	83,700	6,562,080
1872	2,113,700	6,742,703	343,900	23,343,932	84,500	6,589,310
1873	2,008,000	6,566,160	343,900	21,748,230	83,600	5,919,716
1874	1,706,800	6,667,612	350,700	20,933,283	81,000	5,015,520
1875	1,604,300	8,830,603	364,700	20,766,018	85,000	5,009,050
1876	1,588,300	8,671,572	368,300	19,589,877	82,400	4,223,000
1877	1,950,000	10,003,500	379,300	18,027,423	119,000	5,781,020
1878	1,969,500	4,391,985	386,900	16,857,233	117,800	5,189,080
1879	1,812,000	5,907,120	402,400	18,124,066	109,600	5,310,984
1880	1,739,500	6,714,470	398,376	21,145,788	87,544	5,883,081
1881	1,935,946	9,002,140	398,921	20,567,346	113,800	7,643,684
1882	1,916,587	10,982,044	370,028	26,142,478	116,107	8,611,656
1883	1,954,910	9,618,201	370,028	27,411,674	113,785	9,028,840
1884	2,052,665	9,709,105	371,878	25,430,455	116,061	8,877,506
1885	2,032,138	7,068,996	383,034	24,394,384	124,185	8,616,370
1886	1,808,003	6,905,247	386,864	26,242,445	122,943	8,883,535
1887	1,718,173	7,329,727	390,733	28,250,002	162,285	11,680,018
1888	2,147,716	9,018,152	398,548	28,207,215	159,039	11,651,979
1889	2,255,102	9,444,369	390,577	28,474,801	155,858	11,712,918
1890	2,300,204	8,413,686	394,483	29,346,700	148,065	10,847,737
1891	2,316,206	9,066,686	402,373	27,890,626	151,026	4,472,211
1892	1,994,277	10,791,033	410,420	27,963,224	153,291	9,887,255
1893	1,704,849	8,505,892	430,941	24,237,842	150,225	8,253,398
1894	1,758,952	6,887,351	439,560	18,201,932	142,714	6,038,957
1895	1,688,504	6,053,946	417,582	14,521,752	131,297	4,740,184
1896	1,604,164	5,359,192	400,879	13,050,621	116,854	3,909,482

LOUISIANA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	90,000	\$2,215,800	172,600	\$2,696,012	90,000	\$196,200
1871	90,900	2,272,500	177,700	2,256,790	77,400	165,690
1872	93,000	2,480,400	181,200	2,243,356	73,500	147,000
1873	90,700	1,877,400	173,900	1,787,622	64,000	112,400
1874	87,000	1,760,010	168,900	1,691,658	62,600	117,688
1875	89,600	1,855,615	171,900	2,007,732	68,800	140,352
1876	89,600	1,855,616	171,900	1,722,438	71,500	133,765
1877	112,000	2,281,440	275,000	2,948,000	125,000	225,000
1878	110,900	1,863,120	118,700	927,047	127,500	232,650
1879	115,300	2,073,600	119,900	1,151,040	135,100	225,617
1880	115,300	2,048,256	118,701	1,278,410	116,994	191,870
1881	144,989	2,588,654	317,664	3,796,685	135,631	227,800
1882	147,889	2,953,343	285,896	3,139,160	128,849	217,755
1883	153,452	3,135,024	271,603	3,318,089	124,984	208,723
1884	148,848	2,709,034	258,023	3,263,691	121,234	203,673
1885	153,313	2,912,947	252,863	3,016,048	116,385	182,466
1886	157,912	2,408,158	265,506	3,251,655	111,730	173,015
1887	162,649	2,651,179	270,813	3,069,187	113,965	186,801
1888	169,155	2,831,655	281,649	2,936,613	116,244	178,877
1889	177,013	2,898,644	295,731	2,884,941	115,062	179,114
1890	175,837	2,989,229	295,731	2,837,633	113,931	182,825
1891	179,364	3,066,953	296,688	2,989,123	118,488	191,200
1892	177,580	3,196,080	289,727	2,922,217	191,951	296,641
1893	175,784	2,900,436	361,131	3,544,504	184,273	279,631
1894	177,542	2,343,554	371,574	3,121,186	178,745	244,112
1895	166,889	2,353,185	312,122	2,603,311	148,571	203,353
1896	153,538	2,341,454	298,425	2,321,531	139,311	166,885

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	300,000	\$1,290,000	70,800	\$6,463,332	75,500	\$10,178,645
1871	288,000	1,296,880	72,200	6,164,436	76,200	8,881,110
1872	290,800	1,142,844	75,000	7,559,350	78,200	9,265,158
1873	247,100	793,191	75,700	6,526,854	78,400	8,632,624
1874	210,000	751,800	74,900	6,189,740	79,800	8,067,478
1875	222,600	885,948	76,300	4,484,914	79,900	6,708,404
1876	242,600	907,324	77,000	4,335,870	79,100	6,034,539
1877	350,000	1,438,500	78,500	4,179,340	79,100	5,294,163
1878	360,500	1,229,305	79,300	3,622,123	80,700	4,746,774
1879	378,500	1,521,570	82,500	3,147,376	80,700	5,613,482
1880	425,400	2,539,124	82,500	4,726,426	80,700	6,984,585
1881	627,154	2,527,431	104,950	6,453,486	77,441	6,006,690
1882	661,439	2,427,088	105,475	6,917,050	74,843	5,759,382
1883	626,527	2,398,272	110,749	6,616,145	75,630	6,763,278
1884	663,874	1,877,700	111,856	6,598,386	75,830	6,455,408
1885	580,790	1,890,449	112,975	6,372,367	78,863	6,801,147
1886	551,751	1,754,567	114,105	6,534,652	81,229	6,876,676
1887	573,821	1,789,663	119,810	6,847,497	84,478	7,472,811
1888	631,293	2,153,763	122,260	6,645,393	86,168	7,365,083
1889	706,847	2,120,842	124,650	6,461,366	96,785	8,078,679
1890	706,947	2,243,850	122,167	6,573,443	95,733	7,949,274
1891	756,433	2,380,328	127,043	6,562,241	91,904	7,514,451
1892	707,779	2,568,165	132,125	6,871,827	90,965	7,290,690
1893	806,168	3,019,804	130,804	6,047,731	92,805	7,316,191
1894	636,415	2,750,032	130,804	4,665,785	90,949	5,613,295
1895	688,720	2,534,629	137,344	4,868,326	90,040	5,068,858
1896	790,991	2,235,255	141,464	3,855,824	88,239	4,661,317

MAINE.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	141,300	\$5,139,081	191,200	\$7,070,576	415,000	\$1,132,950
1871	117,200	2,945,236	149,100	3,621,639	348,600	1,073,688
1872	147,000	5,396,256	185,100	7,152,264	413,800	1,775,202
1873	153,500	5,756,250	198,000	7,749,720	444,900	1,693,751
1874	162,700	6,426,050	201,000	7,688,352	491,500	2,020,065
1875	164,300	6,079,100	201,000	7,155,386	525,900	1,987,902
1876	167,500	5,025,000	199,800	5,150,841	520,600	1,509,740
1877	165,800	4,191,424	195,800	4,736,402	525,800	1,461,724
1878	169,100	3,838,570	201,700	4,187,392	557,300	1,499,137
1879	160,600	3,870,460	203,700	4,888,800	596,300	1,926,049
1880	157,388	3,652,975	199,028	4,563,450	632,078	2,028,970
1881	151,599	3,903,674	181,740	4,607,109	577,236	1,847,155
1882	152,054	4,877,822	179,023	5,689,185	577,236	1,841,383
1883	162,086	5,392,277	188,919	6,051,076	577,236	1,627,806
1884	163,716	5,238,912	187,030	5,893,486	548,374	1,283,195
1885	165,353	4,977,125	187,030	5,590,174	537,407	1,156,771
1886	165,849	4,892,546	185,160	5,208,833	526,659	1,470,695
1887	167,507	4,857,703	185,160	5,093,108	547,725	1,645,914
1888	174,207	4,877,706	185,160	4,798,092	547,725	1,643,175
1889	175,949	4,398,725	157,386	3,739,024	542,248	1,596,920
1890	172,430	4,552,152	157,386	3,767,040	547,670	1,700,516
1891	175,879	4,660,794	152,664	3,776,020	569,577	1,717,274
1892	174,120	4,265,940	145,031	3,201,192	398,704	1,103,413
1893	177,602	3,795,355	130,528	3,181,617	326,937	671,855
1894	182,930	5,368,966	124,002	3,038,342	284,435	549,670
1895	192,077	5,405,047	117,802	2,880,639	258,836	536,438
1896	192,077	4,813,450	108,878	2,181,493	230,364	471,671

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	67,600	\$667,212	83,000	\$7,169,540		
1871	61,500	614,385	78,800	6,228,352		
1872	62,700	620,730	78,000	6,989,580		
1873	60,800	670,016	78,000	7,514,520		
1874	60,100	776,492	78,700	7,445,807		
1875	58,800	685,608	79,400	6,463,954		
1876	59,900	606,589	80,100	5,703,921		
1877	62,200	481,428	81,700	5,102,165		
1878	60,300	299,691	81,700	4,654,449		
1879	60,000	475,800	81,700	4,914,255		
1880	57,600	507,456	81,700	5,375,043		
1881	73,625	837,116	88,728	5,655,395	301	\$27,165
1882	71,416	847,708	89,613	6,475,436	301	25,781
1883	71,416	688,450	88,509	7,285,176	304	24,768
1884	71,416	627,747	89,394	7,973,051	304	26,276
1885	70,702	620,760	90,283	7,972,453		
1886	71,056	611,080	92,094	8,167,650		
1887	73,188	667,971	94,857	8,638,353		
1888	73,188	714,026	96,754	9,133,393		
1889	79,048	664,913	99,657	9,388,108		
1890	78,253	641,678	100,654	9,383,978		
1891	76,698	650,817	100,719	9,860,299		
1892	70,918	790,721	111,051	8,865,781		
1893	79,966	695,476	116,604	7,354,453		
1894	79,196	742,849	115,438	6,220,866		
1895	78,408	595,865	116,562	6,246,147		
1896	76,836	456,082	115,426	5,376,791		

MARYLAND.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	93,000	\$3,752,040	125,700	\$3,420,297	135,000	\$521,100
1871	96,900	3,125,025	126,900	2,771,496	128,900	522,830
1872	96,900	2,981,613	125,600	2,971,086	129,400	530,580
1873	96,900	3,062,040	125,600	2,872,472	133,200	548,744
1874	99,800	2,913,182	121,800	3,740,500	138,500	565,060
1875	100,700	3,052,217	119,300	2,728,991	141,200	519,596
1876	99,600	2,990,988	118,900	2,465,421	144,000	529,940
1877	101,500	3,084,585	120,400	2,658,432	151,200	551,800
1878	100,500	2,585,865	119,200	2,295,792	152,700	451,992
1879	99,500	2,706,400	120,400	2,376,096	152,700	477,951
1880	98,605	2,940,401	120,400	2,153,066	152,700	467,282
1881	122,292	3,343,483	138,237	3,252,717	172,896	519,800
1882	123,515	3,714,096	136,855	3,547,282	173,780	637,000
1883	124,750	4,522,187	139,592	3,686,075	172,022	572,830
1884	128,493	4,368,782	139,692	3,872,282	172,022	627,800
1885	131,063	3,951,549	138,196	3,466,107	168,592	519,720
1886	133,694	3,943,678	139,578	3,469,213	165,210	544,326
1887	135,021	3,814,343	138,182	3,340,798	160,254	537,171
1888	140,422	3,698,078	134,037	2,947,584	152,241	497,295
1889	141,825	3,454,881	127,335	3,358,008	153,793	528,022
1890	143,244	3,581,100	124,788	3,514,164	156,838	575,732
1891	147,541	3,867,050	121,044	2,637,328	161,680	611,520
1892	149,016	3,896,788	119,334	2,562,052	151,506	598,232
1893	147,526	3,486,080	112,044	2,454,883	145,446	467,843
1894	147,526	3,701,427	113,770	2,485,494	138,174	361,549
1895	150,477	3,686,087	116,045	2,241,000	129,894	318,325
1896	150,477	3,432,380	113,724	2,543,205	124,669	331,361

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	259,200	\$2,011,892	102,500	\$9,278,300	10,800	\$1,337,080
1871	256,600	1,311,226	103,500	9,432,990	10,800	1,329,096
1872	264,200	1,684,460	104,500	9,291,065	10,900	1,356,380
1873	256,200	1,555,134	104,500	9,084,635	10,700	1,298,700
1874	248,500	1,473,605	104,500	9,234,825	10,800	1,278,344
1875	233,500	1,657,850	105,500	8,779,710	11,000	1,164,400
1876	252,100	1,684,028	107,600	8,166,840	11,100	1,012,074
1877	259,600	1,458,952	108,600	7,444,530	11,200	990,894
1878	262,200	1,145,814	108,600	7,023,162	11,300	968,088
1879	264,800	1,321,352	108,600	6,765,780	11,300	918,377
1880	264,800	1,496,120	108,600	7,493,410	11,413	1,198,798
1881	332,054	2,300,789	118,032	8,232,732	12,586	1,111,721
1882	325,413	2,583,779	119,212	9,581,068	12,712	1,211,116
1883	325,413	2,453,614	122,788	10,205,774	12,830	1,439,800
1884	300,142	1,944,503	125,244	10,544,292	12,967	1,456,084
1885	290,868	1,785,115	126,496	10,324,641	13,226	1,430,096
1886	275,879	1,789,077	129,026	10,758,077	13,358	1,284,544
1887	281,397	1,756,621	130,316	11,207,590	13,625	1,474,294
1888	270,141	1,780,903	131,619	10,462,758	13,625	1,440,362
1889	343,079	1,882,648	130,303	9,654,144	13,761	1,419,806
1890	346,510	1,781,930	126,394	10,129,235	13,623	1,421,487
1891	349,075	2,098,449	131,450	10,490,907	13,467	1,224,097
1892	325,477	2,237,576	133,685	10,101,585	13,622	1,436,879
1893	328,732	2,335,475	136,350	8,641,027	13,212	1,206,023
1894	332,019	2,556,714	136,350	6,297,855	13,212	828,314
1895	338,650	1,800,651	134,995	6,040,939	13,212	808,361
1896	331,886	2,237,741	133,645	5,111,360	12,817	748,287

MASSACHUSETTS.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	129,300	\$8,240,988	122,700	\$5,479,782	72,000	\$234,720
1871	140,600	5,605,722	120,270	4,232,242	69,900	231,519
1872	139,100	5,725,366	121,400	4,839,004	74,900	239,688
1873	136,300	6,133,300	122,600	4,803,466	76,300	309,015
1874	139,000	6,463,700	121,300	4,706,444	76,300	265,586
1875	140,300	6,780,080	120,000	5,710,300	76,300	270,960
1876	148,700	5,948,000	110,400	4,505,324	61,000	223,870
1877	151,000	6,165,472	112,800	4,194,360	60,300	217,080
1878	160,700	5,222,750	114,900	5,893,321	60,900	175,368
1879	167,100	5,848,300	114,900	3,922,080	63,300	223,614
1880	173,784	6,082,440	116,049	4,279,987	65,199	149,366
1881	151,187	4,989,171	109,510	3,449,585	68,659	205,977
1882	152,069	5,906,544	110,605	3,791,530	69,348	238,380
1883	160,228	6,168,701	118,283	3,762,321	69,348	277,284
1884	163,431	5,729,086	107,309	3,453,304	67,959	238,536
1885	129,968	5,508,963	108,382	3,432,457	64,581	190,104
1886	175,067	6,127,346	110,550	3,453,157	63,270	211,164
1887	180,319	6,161,500	105,023	2,990,105	62,637	206,702
1888	183,925	6,161,488	103,973	2,908,977	59,505	191,180
1889	174,729	5,678,693	98,774	2,492,063	56,530	190,789
1890	176,479	5,717,822	96,799	2,548,136	55,965	208,470
1891	177,476	5,774,296	96,799	2,495,797	57,644	223,947
1892	181,770	5,994,410	92,927	2,292,056	53,032	226,712
1893	178,135	5,730,288	86,422	2,308,502	51,441	157,760
1894	178,135	5,740,388	82,965	2,029,381	49,393	169,137
1895	174,572	6,046,428	80,476	2,121,082	48,385	159,703
1896	172,836	5,319,584	75,647	1,840,485	42,104	142,206

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	84,800	\$1,318,640	99,900	\$12,976,011		
1871	60,500	953,925	101,800	11,536,094		
1872	80,500	1,084,335	101,800	11,020,868		
1873	78,000	1,009,280	102,800	12,327,776		
1874	75,600	1,146,384	105,800	12,175,464		
1875	75,600	1,369,088	104,700	9,416,718		
1876	78,600	1,163,280	131,000	11,657,080		
1877	78,600	1,080,366	132,300	11,570,968		
1878	84,900	969,558	131,000	10,401,400		
1879	84,900	1,057,854	136,200	13,009,824		
1880	88,290	1,181,852	149,820	11,829,787		
1881	79,322	1,213,627	60,225	4,777,649	245	\$23,765
1882	80,908	1,157,793	60,225	6,151,381	247	27,664
1883	80,669	1,097,356	61,429	6,432,845	219	28,635
1884	81,701	1,014,726	62,043	6,457,435		
1885	77,610	779,577	62,663	6,463,334		
1886	76,440	775,319	63,916	6,816,300		
1887	65,314	672,882	65,194	7,015,576		
1888	65,314	722,944	66,488	7,094,189		
1889	68,580	658,997	63,838	6,678,327		
1890	67,208	619,067	63,200	6,722,394		
1891	66,536	652,666	64,484	6,727,722		
1892	65,871	706,796	65,109	6,652,567		
1893	63,895	724,622	65,780	4,802,581		
1894	61,256	542,734	65,780	4,874,627		
1895	60,720	512,647	65,102	4,719,355		
1896	58,297	482,625	63,800	4,125,946		

MICHIGAN.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	333,900	\$13,739,085	450,000	\$14,242,500	3,072,800	\$6,852,244
1871	347,200	12,797,782	459,000	13,058,550	3,164,900	9,081,614
1872	350,600	11,681,982	463,500	13,103,145	3,418,000	9,878,120
1873	350,600	10,693,300	468,100	11,895,059	3,486,300	8,611,161
1874	357,600	11,729,380	449,300	12,243,425	3,416,500	10,451,480
1875	361,100	12,169,070	410,000	9,016,398	3,450,000	9,144,080
1876	366,300	11,689,242	357,700	8,442,451	2,100,000	5,712,000
1877	375,800	11,268,000	389,700	8,515,520	1,750,000	4,427,500
1878	416,900	11,205,272	416,000	9,737,820	1,850,400	4,186,000
1879	416,900	11,125,382	432,800	9,234,313	1,930,056	4,696,682
1880	416,900	11,069,861	393,680	8,653,910	2,320,752	7,240,746
1881	388,424	11,730,405	501,982	14,885,579	2,436,790	7,822,086
1882	400,077	11,950,685	507,002	13,765,258	2,412,422	7,261,380
1883	404,078	14,724,602	491,792	14,140,603	2,364,174	6,359,629
1884	416,200	14,567,000	501,628	12,929,152	2,269,007	4,788,871
1885	420,362	12,770,598	521,843	13,484,680	2,156,127	5,489,187
1886	432,973	13,106,093	521,843	12,865,948	2,113,004	5,743,900
1887	437,303	12,681,787	511,408	12,557,817	2,134,134	5,093,082
1888	441,676	12,698,185	521,634	10,710,832	2,240,841	6,854,766
1889	454,926	13,937,558	548,716	10,155,165	2,263,249	7,348,716
1890	459,475	11,569,581	503,699	9,521,899	2,353,779	7,560,538
1891	459,475	11,137,674	508,938	9,506,289	2,518,544	8,512,679
1892	464,070	12,761,625	463,134	8,494,054	2,392,617	5,469,323
1893	468,711	13,250,460	472,397	8,584,482	1,961,946	3,667,001
1894	478,085	12,635,787	458,225	7,018,495	1,491,079	2,843,139
1895	468,523	11,788,089	398,656	7,076,135	1,341,971	3,536,449
1896	456,153	12,199,085	370,750			

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	517,400	\$3,813,238	274,500	\$21,874,005	4,200	\$390,936
1871	532,900	2,488,043	282,700	21,994,080	4,000	351,920
1872	543,500	2,256,020	282,700	22,729,080	4,000	363,320
1873	510,800	2,446,732	288,900	22,317,303	3,900	320,463
1874	458,700	3,125,063	291,100	23,375,330	3,700	322,048
1875	458,700	3,645,421	291,900	24,437,839	3,800	365,256
1876	505,600	3,721,216	305,400	22,993,102	3,800	354,194
1877	556,100	3,381,068	314,900	23,223,975	4,200	369,126
1878	567,200	2,138,344	333,900	24,921,506	4,300	373,089
1879	538,800	2,650,396	350,500	26,525,840	4,400	374,526
1880	506,437	2,952,528	354,005	28,040,736	4,576	398,680
1881	915,867	6,933,113	386,354	25,267,552	5,134	402,146
1882	934,184	7,893,655	400,005	31,564,395	5,339	504,269
1883	840,786	5,128,673	408,005	34,815,067	5,606	562,463
1884	849,174	5,154,486	420,245	35,876,316	5,718	563,905
1885	840,682	4,430,393	428,050	35,826,292	5,775	575,180
1886	823,868	4,794,419	454,369	38,563,565	4,496	556,206
1887	906,255	5,789,700	458,013	42,126,410	6,065	626,672
1888	906,255	6,289,051	463,502	43,034,316	6,065	623,209
1889	976,755	5,187,400	477,407	40,206,732	6,065	597,427
1890	910,242	4,073,394	472,633	38,366,437	6,065	572,233
1891	892,037	4,611,833	519,396	40,757,393	3,779	535,991
1892	713,630	5,302,272	530,294	40,659,672	3,783	382,613
1893	720,768	5,161,405	503,779	30,335,949	3,026	237,536
1894	727,974	4,316,886	483,628	25,793,905	3,026	169,854
1895	720,694	4,203,518	454,010	20,340,085	3,026	143,903
1896	713,487	4,220,277	427,383	18,437,058	2,781	104,659

MINNESOTA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	153,800	\$5,054,976	228,900	\$5,207,275	140,000	\$210,800
1871	168,900	5,016,330	251,700	5,587,740	145,600	381,472
1872	182,400	5,486,562	269,300	5,778,792	151,400	406,812
1873	196,900	5,172,563	282,700	6,222,227	157,400	442,294
1874	222,400	5,604,480	310,900	5,966,171	176,200	419,866
1875	232,500	5,881,865	329,500	6,606,475	190,200	500,226
1876	249,800	5,258,290	339,300	6,131,151	219,200	487,436
1877	249,800	5,453,134	290,000	5,896,900	300,000	660,000
1878	278,900	5,326,990	316,100	5,462,308	307,500	648,825
1879	304,000	6,128,640	322,400	5,629,104	307,500	654,975
1880	316,160	7,227,418	323,848	6,833,461	313,650	802,944
1881	291,833	7,733,591	391,175	8,476,702	278,302	681,840
1882	321,368	9,923,844	414,645	10,308,075	281,085	784,727
1883	343,964	10,831,716	427,084	10,916,267	275,463	732,732
1884	364,496	10,872,916	439,897	10,790,673	272,708	688,132
1885	396,366	10,768,020	448,695	10,068,280	278,162	615,294
1886	417,275	10,640,513	475,617	10,544,186	278,162	655,239
1887	493,966	10,306,683	489,886	9,974,076	285,725	674,696
1888	455,664	10,181,907	514,380	9,309,253	337,500	759,105
1889	492,117	10,231,112	617,256	10,188,617	327,375	800,106
1890	565,935	11,001,668	617,256	9,377,356	390,649	881,245
1891	577,254	11,112,140	641,946	10,187,680	357,101	998,586
1892	571,481	11,143,880	648,395	10,393,683	499,841	1,447,823
1893	577,196	11,209,146	778,058	10,687,363	514,957	1,128,129
1894	588,740	11,863,111	754,687	10,365,995	489,192	876,241
1895	600,515	12,875,042	684,321	10,434,540	455,881	844,230
1896	618,530	14,541,640	652,682	10,430,321	404,904	887,711

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	177,000	\$1,169,970	119,900	\$9,487,687	2,700	\$281,205
1871	203,500	1,056,165	131,800	10,089,290	2,900	256,231
1872	202,600	1,054,288	142,300	11,216,066	3,000	266,190
1873	201,200	963,748	132,200	11,046,678	3,060	247,660
1874	206,200	1,042,416	165,800	12,070,240	3,200	365,962
1875	213,400	1,491,668	172,400	12,945,516	3,200	309,628
1876	215,500	1,232,680	310,000	20,677,000	6,000	501,660
1877	180,000	952,200	215,000	14,726,000	6,100	508,727
1878	196,200	725,940	247,300	15,582,373	7,000	553,140
1879	194,200	1,025,376	274,500	17,727,210	7,300	648,313
1880	208,900	1,074,464	285,490	19,957,907	7,528	716,083
1881	389,043	2,626,040	270,146	17,893,685	9,380	751,807
1882	424,057	3,159,225	289,056	22,332,467	9,755	946,018
1883	411,385	2,147,169	306,399	25,124,718	9,853	983,625
1884	431,902	2,263,166	318,655	25,798,309	10,050	990,128
1885	440,540	2,056,000	334,588	28,767,040	10,553	1,035,689
1886	422,918	1,943,730	354,663	29,402,052	10,447	1,036,624
1887	549,793	3,254,775	379,499	31,445,399	10,969	1,034,415
1888	522,803	3,631,574	300,874	32,491,024	11,188	1,041,779
1889	527,528	2,847,586	384,793	30,761,148	11,412	1,010,023
1890	538,077	2,961,067	390,835	29,728,397	11,412	1,004,563
1891	591,885	3,429,384	461,185	35,309,345	10,271	866,410
1892	550,453	4,195,003	475,021	36,255,007	9,757	829,130
1893	566,967	4,184,216	498,772	29,640,542	9,269	656,370
1894	578,316	3,913,398	503,780	22,711,700	9,269	515,691
1895	580,957	2,869,395	488,647	18,783,980	8,991	422,526
1896	521,660	2,560,977	499,101	16,864,287	8,631	358,967

MISSISSIPPI.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	182,000	\$4,611,890	323,509	\$4,865,765	200,000	\$400,000
1871	183,800	4,361,674	340,100	4,598,162	174,000	348,000
1872	180,100	4,183,912	355,600	4,274,820	167,000	334,000
1873	180,100	3,886,558	329,800	4,053,242	153,000	306,000
1874	180,100	3,756,886	316,800	3,697,686	147,400	294,800
1875	174,800	3,671,838	307,100	3,659,185	151,800	303,600
1876	178,000	3,289,440	310,100	3,352,181	163,900	327,800
1877	186,900	3,380,558	341,100	3,441,029	250,000	500,000
1878	188,800	2,543,186	247,500	1,962,375	192,600	385,200
1879	190,700	2,490,542	247,500	1,962,375	200,300	400,600
1880	200,235	3,099,688	259,875	2,273,362	202,303	404,606
1881	269,519	3,943,063	446,911	4,699,183	290,571	581,142
1882	277,605	4,608,243	433,504	4,354,495	298,477	596,954
1883	274,829	4,603,366	420,499	4,545,594	293,477	586,954
1884	272,081	4,579,123	416,294	4,323,653	281,738	563,476
1885	277,623	4,429,267	420,457	4,158,822	270,108	540,216
1886	283,073	4,076,251	424,082	3,823,653	242,971	485,942
1887	285,904	4,445,807	429,909	4,064,000	247,830	495,660
1888	287,340	4,381,775	437,487	4,307,671	252,787	505,574
1889	309,234	4,756,019	441,862	4,126,898	240,148	480,296
1890	306,142	4,745,201	424,188	3,774,258	235,345	470,690
1891	312,265	4,605,900	419,946	3,946,971	223,578	447,156
1892	309,142	4,173,417	411,547	3,092,607	447,158	894,316
1893	302,959	3,911,201	555,568	4,298,363	415,855	831,710
1894	302,959	3,993,141	516,697	3,497,629	380,904	761,808
1895	293,870	4,058,345	485,685	3,636,691	343,996	687,992
1896	290,931	3,738,463	446,889	3,589,456	308,156	616,312

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	850,000	\$3,740,000	82,000	\$8,608,572	96,300	\$12,301,320
1871	918,000	3,167,100	83,400	7,648,614	97,200	11,665,520
1872	890,400	2,653,362	87,500	8,211,975	98,100	11,278,571
1873	819,100	2,858,059	88,300	7,682,100	96,100	10,593,790
1874	768,000	2,887,125	88,300	7,048,989	96,100	8,803,721
1875	792,900	3,417,399	89,100	6,775,164	96,100	9,328,027
1876	1,189,300	4,352,338	90,800	6,284,298	96,100	8,331,520
1877	1,284,400	4,289,396	95,300	6,253,566	98,000	7,811,200
1878	1,386,700	3,480,617	97,200	4,993,164	100,000	6,347,000
1879	1,636,200	4,418,010	99,100	5,721,043	104,000	7,372,500
1880	1,230,800	4,000,100	101,082	7,355,737	109,200	9,550,632
1881	1,163,396	4,653,344	113,432	8,303,222	131,076	10,531,956
1882	1,070,269	4,334,589	114,566	8,318,637	135,068	10,915,397
1883	1,177,296	3,873,304	120,294	9,056,935	139,058	12,682,090
1884	1,224,288	3,979,261	122,700	8,993,910	144,620	13,290,206
1885	1,212,144	3,685,645	125,154	8,688,875	147,512	13,064,504
1886	1,115,172	3,345,516	130,160	9,187,566	153,412	12,953,953
1887	1,226,689	3,801,754	134,065	9,645,784	159,548	13,938,374
1888	1,312,567	4,144,529	138,087	9,308,519	172,312	14,691,243
1889	1,443,812	3,919,662	139,468	9,198,458	196,436	17,008,569
1890	1,371,022	3,630,682	135,284	8,948,373	186,614	15,880,261
1891	1,357,908	3,685,357	155,577	9,733,285	162,354	13,283,547
1892	1,371,465	4,183,030	159,466	9,495,396	163,978	12,357,840
1893	1,577,308	5,478,907	164,250	8,654,912	150,860	10,109,588
1894	1,687,012	4,755,017	170,820	6,932,520	150,860	8,256,340
1895	1,940,755	5,991,888	182,777	7,269,553	153,877	7,924,027
1896	1,998,978	4,790,752	195,571	6,882,938	160,032	7,811,371

MISSOURI.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	371,200	\$11,848,704	731,100	\$17,882,706	1,578,300	\$2,540,902
1871	363,400	10,169,380	767,600	13,770,741	1,451,000	2,800,243
1872	405,200	9,424,952	782,900	14,327,070	1,437,300	2,946,465
1873	421,400	9,460,430	806,300	14,061,872	1,408,500	2,676,150
1874	421,400	8,217,300	790,100	14,638,173	1,366,300	2,609,442
1875	438,200	9,140,852	813,800	14,143,844	1,284,300	2,388,612
1876	460,100	9,712,711	846,300	14,530,971	1,297,000	2,477,270
1877	506,100	10,977,509	1,075,000	18,952,250	1,271,000	2,313,220
1878	516,200	9,188,360	1,632,000	24,382,080	1,295,500	2,061,276
1879	526,500	10,114,065	1,648,300	28,795,801	1,523,300	2,787,630
1880	542,395	10,981,474	1,697,749	31,119,739	1,619,031	3,547,610
1881	648,000	14,930,225	1,382,748	27,745,509	1,425,411	2,850,822
1882	681,379	17,184,378	1,376,373	28,000,191	1,453,919	2,951,456
1883	674,565	18,887,820	1,335,082	30,199,555	1,439,380	2,878,780
1884	688,056	18,577,512	1,321,731	29,738,948	1,318,623	2,396,135
1885	708,698	17,426,884	1,387,818	28,921,884	1,285,078	1,908,390
1886	729,959	17,154,637	1,429,458	27,441,923	1,182,272	1,908,838
1887	737,259	14,929,495	1,429,453	26,077,367	1,087,000	1,894,973
1888	737,259	14,229,099	1,443,748	24,349,324	1,109,444	1,984,573
1889	774,122	14,344,811	1,515,935	24,221,622	1,198,300	2,506,754
1890	812,828	13,818,076	1,819,122	27,412,175	898,050	2,173,834
1891	869,726	15,220,205	1,928,399	31,821,346	916,623	2,355,262
1892	834,937	14,193,429	1,831,856	28,479,321	1,089,948	3,079,414
1893	784,841	13,868,140	1,850,175	28,120,350	1,000,953	1,914,023
1894	753,447	14,014,114	1,704,670	28,036,482	890,820	1,401,587
1895	723,300	17,359,416	1,686,980	32,565,872	774,738	1,475,053
1896	701,610	16,073,885	1,568,901	32,545,006	697,264	1,326,197

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	2,200,000	\$9,548,000	489,000	\$39,723,630	83,400	\$6,958,022
1871	2,530,000	8,222,500	511,900	27,202,366	87,500	6,416,375
1872	2,656,500	6,375,600	527,200	27,145,528	89,200	6,329,638
1873	2,093,300	8,590,880	543,000	26,321,640	89,200	6,092,380
1874	2,082,600	6,518,538	570,100	24,571,310	125,000	7,283,750
1875	1,814,300	11,133,342	591,500	26,400,100	126,200	7,070,980
1876	2,590,000	13,952,000	598,900	25,361,437	124,900	6,314,944
1877	2,585,600	10,652,672	604,800	25,183,872	190,000	9,448,700
1878	2,817,000	6,226,896	627,300	25,022,907	191,900	8,324,622
1879	2,630,400	9,014,176	639,800	25,828,726	191,900	9,121,067
1880	2,630,000	9,982,200	646,198	30,474,698	184,224	10,550,508
1881	4,097,811	17,907,434	674,454	33,838,525	192,967	12,061,687
1882	3,892,920	21,644,635	687,943	40,574,879	194,917	13,254,356
1883	4,337,568	19,375,063	701,772	42,516,124	194,917	14,565,385
1884	4,210,190	16,924,976	715,736	42,364,414	196,866	15,061,643
1885	4,168,001	14,404,922	737,208	43,138,118	212,615	14,407,003
1886	3,876,325	14,032,297	759,324	44,542,180	218,063	14,790,693
1887	3,798,700	15,043,246	782,104	45,040,906	225,563	15,019,534
1888	5,200,000	24,585,000	797,748	49,140,432	227,819	15,825,020
1889	5,086,400	18,560,824	789,760	47,180,413	237,067	15,507,676
1890	4,586,400	15,612,106	805,564	48,573,503	237,000	15,627,401
1891	4,032,234	16,583,505	950,690	54,892,732	248,550	15,911,437
1892	4,076,362	23,906,041	968,589	56,146,250	249,348	14,324,516
1893	3,709,517	18,045,671	1,008,361	38,509,008	256,828	11,791,483
1894	3,561,126	16,050,041	968,277	27,031,442	249,123	8,096,916
1895	3,189,411	12,363,872	918,415	28,030,549	231,684	6,914,427
1896	3,074,329	12,260,648	854,126	21,175,639	215,466	6,445,651

MONTANA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	13,960	\$516,520	590,000	\$14,809,000	405,000	\$1,231,200
1883	14,239	526,843	672,600	17,595,216	465,750	1,350,675
1884	23,000	920,000	615,000	17,324,550	625,000	1,537,500
1885	25,300	936,100	725,700	16,023,456	718,750	1,523,391
1886	29,085	1,091,063	812,784	18,773,310	754,688	1,762,197
1887	31,132	884,149	934,500	17,948,007	1,265,000	2,658,398
1888	31,443	1,108,366	962,535	21,062,514	1,391,500	3,448,415
1889	33,015	982,196	961,786	16,925,963	1,989,845	4,467,739
1890	34,005	974,923	932,697	14,242,293	2,089,337	4,948,583
1891	35,705	1,026,519	1,025,967	16,725,323	2,089,337	5,228,566
1892	36,419	1,037,942	1,036,227	18,049,013	2,528,068	6,528,560
1893	36,419	898,457	1,056,952	16,627,979	2,780,908	4,891,695
1894	39,393	976,638	1,078,091	15,822,066	2,805,717	4,227,400
1895	42,086	1,174,160	1,153,557	19,882,720	3,061,502	4,740,429
1896	42,928	1,108,830	1,176,628	20,708,660	3,122,732	5,033,220

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	17,200	\$182,320	39,900	\$2,436,204	929	\$89,268
1883	17,544	162,808	45,885	2,826,887	1,022	74,780
1884	19,298	189,120	105,000	5,860,050	2,800	211,540
1885	19,298	120,805	120,750	7,568,028	8,960	753,984
1886	20,263	119,168	129,203	6,535,088	9,229	662,181
1887	22,289	150,898	187,344	9,547,985	5,537	351,746
1888	23,403	198,342	200,458	9,427,934	5,316	312,989
1889	29,254	198,926	216,495	8,989,946	2,450	135,316
1890	35,105	250,302	151,547	5,978,527	1,838	97,424
1891	35,105	263,290	197,011	7,131,796	1,231	58,053
1892	38,616	364,730	206,862	7,236,244	1,243	58,545
1893	39,388	363,036	196,519	5,108,703	994	45,217
1894	45,690	297,807	198,484	4,481,371	994	33,811
1895	52,087	359,868	182,605	4,005,441	994	26,467
1896	51,045	401,486	175,301	4,272,970	924	29,067

NOTE.—Returns from Montana previous to 1883 were grouped with Nevada, Colorado, and the Territories.

NEBRASKA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	34,800	\$1,454,968	54,500	\$1,632,375	26,700	\$59,806
1871	41,700	1,450,500	65,400	1,594,452	38,800	81,918
1872	46,800	1,417,968	73,300	1,840,248	36,600	102,846
1873	49,900	1,472,050	87,800	2,073,836	39,100	86,802
1874	53,800	1,522,002	79,000	1,805,150	42,600	106,630
1875	59,700	1,676,973	86,900	1,804,044	48,900	135,453
1876	85,200	2,235,916	195,400	4,076,044	60,600	166,650
1877	93,700	2,536,152	205,107	4,368,630	62,400	172,848
1878	127,600	3,086,852	369,000	7,177,050	144,000	331,200
1879	142,800	3,715,400	428,000	9,210,560	172,800	471,744
1880	157,190	4,207,976	505,040	10,807,856	193,538	532,224
1881	185,305	5,041,628	692,941	15,937,643	249,316	648,222
1882	226,145	7,277,346	1,190,000	30,440,200	324,111	794,072
1883	255,544	8,432,952	1,368,500	36,183,140	333,834	727,758
1884	296,209	8,586,270	1,505,350	39,349,849	373,894	783,916
1885	309,106	9,520,465	1,535,457	37,916,508	448,673	965,993
1886	333,334	8,889,999	1,048,300	25,460,778	439,700	844,004
1887	357,202	9,108,651	1,079,648	23,763,690	422,112	852,456
1888	400,066	9,001,455	1,187,611	22,517,226	342,000	634,717
1889	420,069	8,464,360	1,306,372	22,242,548	239,400	503,338
1890	424,270	7,848,965	1,345,563	22,507,902	234,612	548,171
1891	530,338	9,943,838	1,614,676	26,780,300	299,804	690,887
1892	526,935	9,713,148	1,566,236	25,328,073	272,502	723,064
1893	535,536	10,501,861	1,613,223	26,941,631	277,962	643,014
1894	562,313	9,472,974	1,193,785	16,333,731	183,448	339,783
1895	534,197	11,709,598	1,062,499	18,980,260	192,620	421,234
1896	534,197	13,157,272	1,019,970	19,918,494	188,768	460,182

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	76,200	\$653,796	36,200	\$3,006,410	3,400	\$405,700
1871	102,800	588,016	43,400	3,125,668	4,000	399,960
1872	121,300	668,363	47,700	3,488,778	4,100	423,949
1873	128,500	579,535	56,700	4,243,428	4,400	454,168
1874	77,100	315,339	61,800	3,842,106	4,300	419,637
1875	80,900	613,222	67,900	4,713,618	4,600	450,800
1876	170,500	1,224,190	111,000	7,548,000	9,000	880,490
1877	255,700	1,483,060	116,500	7,884,720	9,400	871,622
1878	607,600	1,841,028	157,200	10,586,848	13,600	1,189,320
1879	698,700	3,640,227	176,100	11,350,374	15,200	1,326,808
1880	1,020,000	6,732,000	188,427	12,698,086	16,568	1,496,587
1881	1,016,227	9,061,966	221,253	13,374,744	21,369	1,598,629
1882	1,026,823	12,153,511	258,865	19,748,887	23,325	2,111,146
1883	1,786,363	13,022,732	284,753	22,069,965	24,968	2,349,297
1884	1,679,200	10,465,000	310,381	23,427,358	27,454	2,569,694
1885	2,012,744	11,748,943	341,419	25,435,716	28,827	2,723,641
1886	2,082,168	13,073,336	382,369	29,349,719	40,358	3,716,460
1887	2,034,525	13,341,813	412,980	31,511,968	41,165	3,721,363
1888	2,264,440	16,032,564	433,629	33,255,585	44,458	4,019,378
1889	2,300,779	12,985,570	542,036	37,787,194	45,792	4,040,759
1890	2,309,779	9,772,670	559,297	35,158,748	45,792	3,642,780
1891	2,596,952	13,557,521	625,286	36,298,786	46,706	3,478,182
1892	2,196,909	17,024,258	667,822	39,776,734	46,474	3,262,531
1893	2,068,964	16,811,961	708,457	29,106,808	46,939	2,672,832
1894	1,516,047	6,447,314	666,950	17,715,302	45,061	1,794,246
1895	1,289,726	6,458,948	632,653	16,259,065	43,709	1,556,735
1896	1,263,931	6,026,422	575,714	14,207,348	41,961	1,356,089

NEVADA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	7,100	\$355,000	26,700	\$617,020	12,800	\$55,188
1871	7,800	312,000	32,000	808,320	12,800	48,000
1872	8,500	331,500	40,000	920,000	15,000	45,000
1873	9,000	337,500	44,000	1,021,680	18,000	49,500
1874	9,300	311,550	44,500	923,375	19,000	57,000
1875	9,900	326,700	46,700	980,700	20,900	54,340
1876	10,000	315,000	48,100	913,900	24,000	50,400
1877	10,500	315,000	50,500	886,780	72,000	144,000
1878						
1879						
1880						
1881						
1882						
1883	14,180	539,280	212,000	3,816,000	387,000	767,080
1884	16,129	598,263	218,360	5,928,474	385,350	793,621
1885	16,350	654,000	240,196	6,022,204	423,885	813,859
1886	16,841	656,799	238,235	6,788,320	661,261	1,145,436
1887	17,033	638,356	317,059	6,949,933	674,486	1,153,371
1888	18,037	631,235	323,400	5,819,648	660,966	1,259,660
1889	18,317	646,704	355,740	7,248,198	694,046	1,344,539
1890	18,369	551,970	373,527	5,426,224	700,966	1,323,632
1891	16,559	513,323	317,498	4,909,739	504,710	1,167,635
1892	14,008	409,833	317,498	4,689,446	504,710	1,254,223
1893	16,308	491,790	353,998	3,990,034	555,181	1,247,082
1894	18,196	533,143	259,078	3,390,732	544,077	1,164,162
1895	18,196	254,744	259,078	2,795,449	544,077	1,316,667
1896	18,196	445,802	259,078	3,126,940	544,077	930,373
		487,653	253,896	4,143,128	544,077	917,314
Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	4,300	\$32,207	8,600	\$504,476	1,000	\$75,000
1871	4,300	30,100	9,400	417,360	1,000	56,639
1872	4,750	35,625	9,870	463,825	1,000	65,010
1873	4,900	41,650	10,100	384,810	1,000	65,730
1874	4,900	42,875	10,200	555,900	1,050	76,650
1875	5,200	46,800	10,900	598,600	1,100	85,900
1876	5,400	49,600	11,000	473,000	1,100	78,100
1877	10,800	75,600	11,500	600,875	1,100	77,275
1878						
1879						
1880						
1881						
1882	12,000	136,800	37,100	1,873,921	1,330	62,934
1883	13,200	110,880	39,328	2,181,413	1,406	122,331
1884	14,256	95,943	40,506	2,400,740	1,434	115,165
1885	14,399	65,517	42,126	2,574,968	1,563	125,062
1886	14,543	77,339	44,654	2,462,449	1,637	121,351
1887	21,067	111,846	45,547	2,342,496	2,154	162,002
1888	20,244	108,308	51,013	3,443,350	2,389	232,413
1889	19,232	101,931	51,523	2,849,279	2,380	159,585
1890	12,501	76,879	48,947	2,355,360	1,777	121,912
1891	12,626	86,107	57,757	2,471,975	1,688	108,651
1892	11,363	77,949	60,645	2,425,732	1,688	86,354
1893	11,590	101,866	55,793	1,318,784	1,604	62,965
1894	11,590	44,042	55,793	1,318,104	1,604	61,629
1895	11,590	72,553	53,561	1,000,260	1,604	44,913
1896	11,126	56,653	53,561	967,320	1,444	46,790

NEW HAMPSHIRE.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	93,000	\$3,562,500	133,000	\$4,870,460	234,000	\$549,900
1871	88,300	3,943,089	117,000	3,589,560	219,900	644,307
1872	90,000	3,240,000	118,100	4,536,221	230,800	976,284
1873	92,700	3,522,600	118,100	4,434,055	237,700	960,800
1874	95,400	3,774,978	118,900	4,564,818	242,400	882,336
1875	98,200	3,789,700	118,000	4,498,180	242,400	854,480
1876	98,200	3,162,040	119,100	3,455,091	242,400	644,784
1877	95,200	3,094,000	121,400	3,626,218	239,900	623,740
1878	98,100	2,578,068	125,000	3,472,500	235,100	536,028
1879	98,100	2,746,800	122,500	3,596,000	242,100	685,143
1880	98,100	2,575,125	123,725	3,865,169	240,042	702,961
1881	91,470	2,423,955	144,678	3,761,628	213,943	620,435
1882	92,385	2,956,320	144,678	4,796,076	211,804	679,891
1883	95,157	3,104,021	141,784	4,741,257	209,686	729,036
1884	96,109	3,116,815	138,948	4,365,746	201,299	511,293
1885	97,070	2,895,408	136,169	4,284,412	195,260	478,387
1886	98,041	2,960,638	138,842	4,255,574	195,280	539,494
1887	99,021	3,020,141	141,670	4,241,119	205,023	610,968
1888	100,011	3,963,326	141,670	3,818,816	194,772	573,608
1889	103,011	2,846,184	116,169	2,772,447	182,824	561,311
1890	104,041	2,757,687	116,169	2,657,072	183,183	536,909
1891	106,122	2,812,283	113,848	2,673,560	189,678	540,751
1892	109,306	2,809,164	109,292	2,357,305	135,848	306,676
1893	112,585	2,455,479	92,898	2,107,888	115,471	274,821
1894	119,340	3,000,308	86,253	2,069,369	106,233	206,961
1895	127,694	3,766,673	84,723	2,067,006	87,111	184,849
1896	128,971	3,497,694	77,028	1,533,410	77,529	190,322

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	47,200	\$839,216	49,500	\$4,419,855	.....	.....
1871	43,400	506,912	47,500	3,754,400	.....	.....
1872	42,000	493,500	47,500	4,132,975	.....	.....
1873	37,800	485,730	47,500	4,237,475	.....	.....
1874	37,000	523,550	47,000	4,361,880	.....	.....
1875	37,300	604,260	47,000	3,804,180	.....	.....
1876	38,700	580,113	56,000	3,805,200	.....	.....
1877	42,900	545,688	75,100	3,408,290	.....	.....
1878	42,900	388,097	57,100	3,219,867	.....	.....
1879	45,000	528,750	57,100	3,505,940	.....	.....
1880	45,460	538,582	57,100	3,412,296	.....	.....
1881	53,971	681,654	47,007	2,877,760	88	\$7,744
1882	54,511	661,218	47,947	3,425,813	88	7,040
1883	55,056	602,313	49,385	3,036,948	80	7,120
1884	54,404	551,113	49,138	4,232,230	.....	.....
1885	51,404	507,725	49,138	4,074,211	.....	.....
1886	53,860	504,938	49,384	4,143,889	.....	.....
1887	54,399	504,311	49,878	4,236,244	.....	.....
1888	51,679	545,862	50,876	4,563,006	.....	.....
1889	52,713	484,299	52,402	4,082,079	.....	.....
1890	53,186	410,969	52,926	4,599,284	.....	.....
1891	51,664	425,711	53,985	4,443,906	.....	.....
1892	51,147	523,384	54,030	4,200,228	.....	.....
1893	51,658	538,151	56,741	3,267,145	.....	.....
1894	54,757	467,487	57,308	2,526,420	.....	.....
1895	56,400	437,523	55,599	2,752,366	.....	.....
1896	56,272	406,790	55,063	2,627,428	.....	.....

NEW JERSEY.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	145,000	\$8,900,100	84,100	\$3,789,546	127,400	\$612,784
1871	147,900	8,104,320	85,709	3,235,175	122,300	621,284
1872	147,800	6,531,264	84,800	2,750,064	125,900	624,464
1873	147,900	6,766,425	83,900	2,840,854	125,900	647,126
1874	147,800	7,025,250	83,900	3,053,121	127,100	667,275
1875	144,300	6,429,213	83,100	3,037,800	125,800	639,258
1876	146,300	6,144,000	82,100	3,134,578	125,800	612,646
1877	149,200	6,161,900	83,700	3,073,464	123,300	572,218
1878	152,200	5,367,012	84,500	2,431,910	127,000	490,080
1878	153,700	5,364,870	84,500	2,515,365	127,400	510,874
1880	153,700	5,195,060	84,500	2,464,865	129,748	585,264
1881	156,640	5,540,367	86,654	2,256,790	118,190	496,398
1882	159,773	6,351,804	70,654	2,393,758	117,008	519,516
1883	164,596	6,472,381	69,947	2,027,009	117,008	508,475
1884	167,857	6,504,569	69,947	2,495,009	119,348	476,199
1885	171,214	5,882,913	69,248	2,390,115	107,413	403,851
1886	172,926	6,225,336	69,940	2,547,186	106,339	361,013
1887	178,114	6,397,855	68,541	2,217,467	105,278	389,100
1888	181,676	6,289,623	68,541	2,143,334	103,170	369,624
1889	183,493	6,325,004	67,858	1,962,417	103,170	416,807
1890	185,328	6,301,152	65,820	1,846,867	100,175	395,497
1891	189,035	6,616,225	63,845	1,835,731	102,077	413,922
1892	188,848	6,704,683	61,930	1,773,981	61,246	256,743
1893	190,734	6,713,887	52,641	1,532,272	57,571	235,177
1894	192,641	6,056,633	48,956	1,174,323	50,662	172,849
1895	200,347	6,887,980	47,487	1,251,502	45,089	182,340
1896	206,357	6,669,140	45,313	1,088,496	41,482	135,567

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	156,000	\$2,410,200	115,800	\$15,054,000	14,800	\$2,072,000
1871	171,600	1,657,656	116,900	15,091,790	14,900	2,234,255
1872	164,700	1,523,475	115,700	14,718,197	14,900	2,157,689
1873	163,000	1,677,270	115,700	15,281,656	15,000	2,199,750
1874	164,600	2,045,978	115,700	13,778,718	15,000	2,024,550
1875	153,000	2,115,980	115,700	12,824,188	15,000	1,924,800
1876	151,400	1,447,384	115,700	10,979,930	14,800	1,646,944
1877	154,400	1,371,072	114,500	10,547,740	14,500	1,577,000
1878	152,900	1,045,836	114,500	9,735,935	14,400	1,501,498
1879	220,400	1,131,460	114,500	9,132,520	13,700	1,464,941
1880	214,688	1,939,520	114,500	10,954,215	13,563	1,646,152
1881	214,688	2,662,131	87,809	7,923,006	9,286	1,071,790
1882	212,541	2,737,372	88,087	8,822,583	9,286	1,062,498
1883	206,165	2,380,459	89,574	9,226,122	9,286	1,124,906
1884	193,795	1,969,801	89,843	9,316,719	9,314	1,130,254
1885	189,919	1,618,574	90,741	9,395,110	9,407	1,123,800
1886	181,618	1,574,526	91,648	9,463,136	9,407	1,126,749
1887	186,063	1,762,326	94,397	9,955,374	9,501	1,120,482
1888	204,669	1,770,761	95,341	10,001,266	9,501	1,135,075
1889	194,436	1,668,973	96,294	9,931,703	9,501	1,091,214
1890	190,547	1,633,653	97,257	9,898,080	9,406	1,101,494
1891	181,029	1,758,746	87,531	8,782,880	8,465	962,967
1892	175,517	2,085,964	87,706	8,393,915	8,390	924,464
1893	163,231	1,981,880	83,321	7,105,087	8,296	843,644
1894	153,437	1,316,729	84,987	5,608,180	8,047	661,103
1895		1,269,448	82,437	5,397,256	7,896	696,480
1896		1,230,872	80,788	4,764,706	7,492	574,576

NEW MEXICO.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	15,785	\$463,287	375,000	\$7,222,500	3,960,000	\$5,940,000
1883	16,743	586,005	690,562	13,818,146	4,435,200	7,539,840
1884	17,580	474,080	959,881	18,074,559	5,410,944	8,873,948
1885	17,932	406,232	1,151,857	20,733,426	4,328,755	6,934,660
1886	18,829	483,340	1,220,968	21,824,802	4,025,742	5,958,068
1887	19,394	400,608	1,257,597	18,911,121	3,623,168	3,953,220
1888	19,782	428,676	1,393,357	18,650,697	3,514,473	4,001,579
1889	20,375	432,969	1,383,357	15,560,693	3,092,736	3,872,106
1890	19,356	387,120	1,341,850	14,771,151	3,123,663	5,268,057
1891	18,775	375,500	1,288,182	14,179,659	2,967,480	4,556,566
1892	18,400	308,000	1,249,537	12,529,733	2,730,082	4,101,948
1893	18,400	308,000	1,224,546	11,556,533	2,921,188	3,689,169
1894	18,952	331,680	979,637	7,338,363	3,008,824	2,602,896
1895	18,383	422,809	793,506	8,056,069	2,738,030	2,732,554
1896	18,751	423,773	753,831	8,864,297	2,683,269	2,847,753
Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
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1878						
1879						
1880						
1881						
1882	19,300	\$206,440	16,640	\$714,189	10,082	\$536,766
1883	23,353	187,758	17,139	714,546	10,183	547,540
1884	24,988	177,415	17,996	678,269	10,488	515,800
1885	17,492	97,082	19,796	779,288	10,098	584,155
1886	20,990	181,565	20,788	745,944	10,912	520,501
1887	19,941	112,466	40,533	1,396,768	10,803	662,504
1888	21,935	120,204	42,580	1,426,788	10,803	580,176
1889	22,593	113,010	52,350	1,552,854	10,263	499,282
1890	24,852	136,688	33,504	1,039,255	9,760	452,421
1891	24,852	146,628	93,000	2,704,905	3,750	162,413
1892	24,355	157,090	91,140	2,124,474	3,638	147,976
1893	27,521	204,590	92,963	1,468,507	3,747	117,530
1894	28,897	140,152	86,456	1,329,070	3,747	102,430
1895	31,787	178,998	83,862	1,398,569	3,747	129,850
1896	31,151	151,143	84,701	1,240,873	3,580	68,306

NOTE.—Returns from New Mexico previous to 1882 were included with Nevada, Colorado, and the Territories.

NEW YORK.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	1,411,100	\$68,452,461	705,000	\$29,800,360	2,080,000	\$4,521,230
1871	1,425,200	56,338,156	697,900	23,798,360	2,059,300	8,277,954
1872	1,430,400	48,939,000	704,800	23,998,440	2,100,300	9,031,230
1873	1,410,600	43,023,300	683,600	19,742,368	2,037,300	8,844,982
1874	1,437,000	55,012,500	669,900	22,763,202	1,906,400	7,528,428
1875	1,496,300	56,111,250	663,200	21,122,920	1,936,500	7,649,175
1876	1,526,200	53,417,000	663,200	19,995,480	1,897,700	6,733,766
1877	1,404,100	45,380,512	606,300	19,705,200	1,518,100	5,049,730
1878	1,446,200	33,797,064	668,300	18,735,174	2,121,000	6,978,080
1879	1,431,700	41,605,302	668,600	17,530,082	2,205,800	7,874,776
1880	1,431,700	38,169,122	648,542	15,000,776	2,338,148	8,347,188
1881	1,436,612	46,124,947	883,829	25,807,907	1,732,332	5,941,799
1882	1,431,278	56,184,975	894,991	30,572,993	1,732,332	7,067,915
1883	1,510,904	54,691,142	886,041	33,084,771	1,732,332	6,323,612
1884	1,541,122	50,857,026	877,181	31,552,201	1,697,085	5,890,967
1885	1,510,300	44,704,880	868,408	27,860,065	1,595,824	4,875,243
1886	1,435,197	46,799,086	854,725	28,512,367	1,579,886	5,212,526
1887	1,540,053	46,971,017	851,128	27,164,003	1,564,067	5,415,583
1888	1,552,373	45,950,241	842,617	26,318,317	1,548,426	5,149,774
1889	1,552,373	43,637,305	783,634	22,094,214	1,548,426	5,481,423
1890	1,536,849	41,817,061	783,634	21,118,774	1,393,583	5,313,055
1891	1,552,217	40,637,041	775,738	20,693,631	1,421,455	5,461,539
1892	1,556,874	41,039,190	768,040	20,410,050	1,492,528	5,690,233
1893	1,572,443	40,537,581	706,597	18,494,980	1,398,051	3,982,896
1894	1,538,167	43,785,764	671,267	15,697,187	1,098,650	2,436,449
1895	1,445,232	35,119,128	597,428	13,813,491	899,179	2,138,796
1896	1,416,327	34,275,113	561,582	11,700,564	809,261	2,166,797

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	658,800	\$7,306,092	652,800	\$38,305,472	19,300	\$2,307,699
1871	678,500	4,980,190	659,300	65,297,072	19,100	2,289,517
1872	671,700	5,581,827	659,300	67,630,994	19,100	2,484,146
1873	651,500	5,036,005	659,300	62,732,395	18,900	2,328,102
1874	588,300	5,775,055	665,800	59,802,156	18,500	2,125,789
1875	568,700	6,477,493	679,100	61,119,000	18,500	1,819,475
1876	580,000	5,394,000	692,000	59,293,496	19,600	1,727,489
1877	975,000	8,151,000	890,000	71,895,300	12,000	1,057,699
1878	975,000	5,879,250	898,900	64,657,877	11,800	966,302
1879	936,000	6,701,760	898,900	68,684,949	11,800	1,053,713
1880	904,080	7,529,465	907,889	66,856,948	11,584	999,084
1881	736,869	8,363,463	616,462	48,173,004	5,082	443,912
1882	744,238	8,156,548	622,627	57,289,231	5,082	542,402
1883	736,796	6,734,315	629,853	60,042,894	5,082	565,099
1884	736,796	6,284,870	635,142	63,742,851	5,107	570,289
1885	722,060	5,435,448	647,845	60,389,110	5,107	548,113
1886	700,398	5,145,731	660,892	65,017,137	5,158	571,699
1887	698,390	5,803,084	674,018	65,395,391	5,210	552,366
1888	679,527	5,911,539	630,758	65,107,085	5,268	548,110
1889	688,321	4,987,014	673,950	64,834,410	5,296	537,575
1890	672,595	4,404,568	640,253	59,831,055	5,288	590,829
1891	672,595	5,035,721	659,461	58,926,068	5,182	514,596
1892	645,691	5,736,162	669,363	56,406,120	4,819	429,174
1893	658,605	5,940,680	702,821	50,466,294	4,819	376,394
1894	658,605	5,041,487	695,738	40,802,049	4,819	345,161
1895	645,433	4,193,897	654,045	31,246,088	4,674	277,737
1896	632,524	4,181,162	621,343	30,802,908	4,534	249,791

NORTH CAROLINA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	203,400	\$4,590,738	298,400	\$3,186,912	315,200	\$513,776
1871	205,400	4,496,208	307,300	3,211,285	298,200	465,034
1872	201,200	3,420,400	316,500	3,104,865	293,200	472,052
1873	199,100	3,086,050	316,500	2,968,770	278,500	431,675
1874	197,100	3,153,600	310,100	2,728,880	275,700	435,608
1875	201,000	3,111,480	313,200	3,191,508	283,900	448,582
1876	203,000	3,097,780	316,300	3,302,309	281,000	432,740
1877	230,000	3,558,100	420,000	4,015,200	490,000	754,800
1878	232,300	5,161,706	415,800	3,401,244	425,000	544,000
1879	230,000	2,898,000	415,800	3,455,238	425,000	616,250
1880	230,000	3,095,800	407,484	3,573,635	385,900	520,965
1881	229,812	3,224,282	429,546	4,402,847	470,871	612,132
1882	236,706	4,066,609	428,069	4,571,777	466,182	617,965
1883	234,389	3,983,753	419,578	4,547,467	455,176	624,003
1884	241,369	4,103,273	427,898	5,006,265	488,350	663,040
1885	238,955	3,978,601	423,619	4,330,469	468,616	600,064
1886	241,345	3,891,184	419,383	4,188,043	450,063	576,061
1887	243,758	3,900,128	419,383	4,607,133	427,560	581,054
1888	247,414	4,082,381	419,383	4,738,441	419,009	575,718
1889	272,155	4,365,366	398,414	4,170,321	414,819	624,718
1890	266,712	4,667,480	390,446	4,343,440	398,228	678,975
1891	269,379	4,741,070	390,446	4,526,990	390,201	710,275
1892	272,073	4,489,285	382,637	4,262,191	396,115	641,707
1893	274,794	4,119,182	386,463	4,308,446	378,309	559,185
1894	274,794	4,028,480	378,734	3,628,730	357,494	480,472
1895	272,046	3,917,482	363,585	3,680,383	343,184	478,069
1896	265,905	3,665,819	345,406	3,300,322	319,170	443,908

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	841,500	\$3,492,225	126,700	\$11,454,947	44,400	\$5,080,692
1871	875,100	2,625,300	130,500	11,815,470	45,700	5,073,614
1872	848,900	2,614,304	131,801	11,879,134	47,500	5,320,950
1873	823,300	2,354,638	131,800	11,148,962	48,400	4,979,392
1874	806,800	2,670,508	133,100	10,441,685	49,300	4,704,699
1875	758,300	3,040,793	139,700	10,473,309	51,700	4,267,318
1876	735,500	3,028,100	141,000	9,912,300	52,700	3,892,949
1877	1,180,800	4,425,000	142,400	9,556,464	55,300	3,901,938
1878	1,262,800	3,737,296	145,200	8,218,320	74,000	4,454,060
1879	1,262,800	3,977,190	146,700	8,687,574	74,700	4,605,255
1880	1,237,300	3,959,360	146,700	9,874,377	74,700	5,575,608
1881	1,380,864	5,689,160	134,354	8,773,316	82,281	6,059,173
1882	1,311,821	5,414,067	135,698	9,810,965	82,281	7,541,876
1883	1,364,294	5,334,390	137,055	10,582,017	84,749	7,146,036
1884	1,432,549	5,787,396	141,167	10,970,088	85,596	7,230,291
1885	1,346,558	4,357,460	142,579	10,625,894	86,452	7,192,173
1886	1,279,230	4,246,700	142,579	10,713,012	88,181	6,994,096
1887	1,266,438	4,464,194	149,708	11,167,280	89,945	7,567,059
1888	1,279,102	4,809,936	151,205	11,579,404	90,844	7,712,432
1889	1,291,893	4,367,760	154,229	11,347,464	96,235	7,881,118
1890	1,291,893	4,343,843	146,518	11,464,957	98,221	8,735,326
1891	1,253,136	4,639,735	131,960	10,366,953	100,186	8,828,881
1892	1,250,402	5,084,282	133,185	10,344,475	99,784	8,630,310
1893	1,334,966	5,328,916	134,517	9,712,005	109,762	8,521,935
1894	1,442,768	5,712,120	139,888	7,701,604	109,762	6,452,414
1895	1,427,945	5,562,196	144,095	7,839,362	110,860	6,574,729
1896	1,455,998	4,524,475	145,536	6,514,860	110,860	5,546,305

NORTH DAKOTA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
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1889						
1890						
1891	65,000	\$1,377,350	272,000	\$4,000,587	320,000	\$1,080,400
1892	117,250	2,408,625	255,680	4,752,725	300,400	1,173,600
1893	140,700	2,784,453	250,566	4,219,914	370,880	754,073
1894	146,828	2,756,820	258,083	4,604,113	367,171	616,701
1895	156,571	3,386,631	255,502	5,061,518	359,823	710,732
1896	161,288	3,514,030	255,502	4,553,911	356,230	695,210

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
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1875						
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1889						
1890						
1891	95,000	\$301,160	142,000	\$10,044,001	8,000	\$716,372
1892	90,250	670,378	161,880	11,128,776	7,840	600,127
1893	99,275	654,226	163,499	9,436,849	7,840	563,274
1894	108,210	724,033	166,799	7,387,493	7,762	494,576
1895	117,949	905,787	170,104	5,814,212	7,607	416,282
1896	120,308	541,385	166,702	6,072,302	7,151	343,461

NOTE.—Returns not separate previous to 1891. (See Dakota Territory.)

OHIO.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milk cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.	Number.	Value.
1870	734,400	\$93,114,098	800,700	\$28,296,738	4,641,000	\$10,488,000
1871	771,000	28,804,560	850,000	25,075,000	4,548,100	14,144,591
1872	780,400	25,006,352	901,000	24,966,710	4,639,000	14,009,790
1873	778,500	23,020,245	882,900	23,220,270	4,639,000	13,081,980
1874	778,500	23,081,976	891,700	23,710,303	4,592,000	12,707,428
1875	800,000	26,433,440	864,900	21,510,065	4,516,000	12,366,752
1876	700,000	23,087,000	775,000	18,111,750	3,900,000	9,828,000
1877	707,000	22,488,460	767,200	18,712,038	3,783,000	10,516,740
1878	714,100	19,637,750	800,000	16,952,000	4,049,000	9,770,900
1879	700,000	18,708,000	782,000	17,717,040	4,080,400	11,547,532
1880	683,000	19,147,590	776,160	18,441,562	4,243,616	13,070,337
1881	751,702	23,415,517	1,038,486	28,558,365	4,951,511	15,349,084
1882	774,253	27,098,855	1,029,101	31,449,610	5,050,541	15,707,183
1883	781,096	28,542,854	1,017,820	29,944,264	5,000,036	14,650,105
1884	783,580	26,225,753	1,017,820	29,923,084	4,900,065	12,250,088
1885	775,724	22,682,624	1,017,820	27,414,096	4,753,034	9,918,156
1886	783,481	22,635,626	957,461	26,827,507	4,562,913	11,533,675
1887	783,481	22,577,645	967,540	24,706,690	4,106,622	10,714,177
1888	783,481	22,555,079	957,865	24,066,440	4,065,556	10,017,637
1889	791,316	19,824,657	886,601	22,317,518	3,943,389	11,027,384
1890	783,403	18,801,672	917,530	19,714,682	4,061,807	13,180,366
1891	783,403	19,585,075	871,662	19,559,404	4,468,067	14,734,581
1892	767,735	19,622,723	845,512	18,767,498	4,378,725	13,000,263
1893	767,735	19,915,048	803,236	16,780,881	3,705,704	8,506,725
1894	783,000	20,062,766	771,107	16,097,322	3,577,419	6,130,021
1895	759,687	18,420,227	680,285	14,093,645	3,754,613	5,247,538
1896	752,001	18,935,385	631,382	14,135,761	2,368,907	5,877,171

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	2,083,000	\$16,040,370	724,200	\$57,559,416	22,200	\$1,850,362
1871	2,173,600	11,324,456	738,000	57,721,560	22,400	1,869,056
1872	2,217,000	10,131,600	738,000	58,910,730	22,600	1,861,562
1873	2,017,400	11,176,398	738,000	58,615,296	22,300	1,807,415
1874	1,734,900	12,352,488	753,300	55,947,591	22,900	1,688,875
1875	1,596,100	12,864,566	780,800	52,001,712	26,500	1,909,060
1876	1,755,700	13,290,649	750,000	47,505,000	26,500	1,754,300
1877	2,250,000	13,185,000	765,000	46,490,100	27,000	1,737,450
1878	2,272,500	7,635,600	772,700	44,136,621	26,700	1,587,048
1879	2,045,200	10,240,452	811,300	46,674,080	24,800	1,505,112
1880	1,963,392	10,053,897	795,074	45,955,277	22,568	1,690,391
1881	2,827,200	20,605,104	714,384	40,955,635	18,702	1,299,789
1882	2,714,112	21,902,884	717,242	55,062,068	20,572	1,724,551
1883	2,442,701	15,144,746	724,414	60,162,593	21,601	1,951,026
1884	2,467,128	13,297,820	738,902	59,141,716	21,817	1,941,031
1885	2,442,457	11,720,864	753,680	59,659,185	21,999	2,104,238
1886	2,320,334	12,967,882	761,217	62,398,601	24,479	2,153,571
1887	2,698,384	15,261,021	723,156	63,132,673	24,721	2,210,795
1888	2,748,436	18,913,639	701,461	60,969,557	21,230	2,123,794
1889	2,611,014	13,619,047	771,007	62,570,402	24,472	2,153,409
1890	2,741,565	11,480,352	779,823	60,529,985	23,983	1,999,493
1891	2,851,228	13,258,212	888,428	66,658,761	18,947	1,546,195
1892	2,423,544	17,984,638	801,093	61,253,716	18,000	1,354,320
1893	2,360,838	15,046,303	864,360	47,408,255	20,700	1,220,326
1894	2,585,922	15,515,532	838,429	34,394,519	20,286	871,975
1895	2,456,626	10,822,911	771,355	29,218,761	19,475	801,980
1896	2,284,662	11,273,436	701,933	25,737,701	18,501	713,872

OKLAHOMA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
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1891						
1892						
1893	20,275	\$364,950	121,219	\$1,878,885	18,222	\$38,286
1894	27,777	506,930	145,463	2,240,133	22,778	63,780
1895	28,888	570,538	155,645	2,365,031	22,322	28,867
1896	72,365	601,156	175,879	3,187,809	23,215	33,041

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
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1887						
1888						
1889						
1890						
1891						
1892						
1893	24,158	\$126,830	29,515	\$1,165,843	5,427	\$263,210
1894	48,316	251,438	34,533	751,008	6,512	282,835
1895	62,811	299,577	33,332	619,668	6,908	155,167
1896	78,514	320,141	39,089	524,222	7,177	155,702

NOTE.—Oklahoma was organized as a Territory on May 2, 1890.

OREGON.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	62,400	\$2,012,400	102,000	\$2,212,380	419,200	\$793,480
1871	66,700	2,527,980	109,100	2,584,393	486,200	1,191,190
1872	70,000	2,306,580	116,700	2,267,481	534,800	1,476,048
1873	73,500	1,794,870	123,700	1,998,992	561,500	1,408,750
1874	76,400	1,654,080	128,800	1,876,274	634,400	1,643,086
1875	80,900	1,759,575	137,600	1,754,400	710,500	1,413,896
1876	88,900	1,818,005	147,200	1,796,980	859,700	1,547,460
1877	102,200	2,005,164	176,600	2,170,414	1,074,000	1,891,296
1878	112,400	2,086,144	188,300	2,287,845	1,160,000	1,822,142
1879	121,400	2,149,062	201,500	2,296,085	1,295,100	1,847,046
1880	125,042	2,647,139	199,485	2,793,984	1,176,433	1,717,592
1881	88,954	1,305,881	331,724	5,015,667	2,333,162	3,739,059
1882	62,491	1,964,062	615,000	11,422,700	2,403,157	5,166,788
1883	55,616	2,562,176	535,600	14,098,076	2,571,378	4,654,194
1884	68,897	1,929,116	551,668	14,917,103	2,519,960	4,067,120
1885	72,342	1,986,511	606,835	14,997,777	2,469,551	3,618,139
1886	75,959	2,392,709	642,245	15,289,941	2,593,029	3,670,173
1887	78,997	2,338,311	598,218	12,172,122	2,930,123	4,967,069
1888	82,157	2,300,398	610,182	11,680,343	2,959,424	5,106,894
1889	88,780	2,423,216	762,728	13,079,841	2,929,580	5,622,344
1890	102,040	2,908,140	724,362	12,463,782	2,431,759	5,154,114
1891	106,122	2,653,050	797,061	13,090,374	2,456,077	5,491,789
1892	107,183	2,572,362	781,110	12,236,899	2,456,077	5,903,182
1893	110,398	2,356,967	804,543	12,041,277	2,529,759	4,833,408
1894	112,606	2,023,530	804,543	10,062,021	2,529,759	2,945,905
1895	113,732	2,096,061	788,452	9,062,040	2,630,949	3,590,863
1896	116,007	2,528,963	741,145	10,043,483	2,604,040	3,450,222

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	149,500	\$375,245	73,400	\$3,084,886	4,200	\$213,444
1871	158,400	600,336	78,500	3,742,680	4,300	234,307
1872	163,100	678,486	80,800	4,096,864	4,000	201,900
1873	171,200	402,320	86,400	3,684,096	3,700	173,806
1874	174,600	651,259	85,600	3,546,540	3,700	176,671
1875	181,500	900,415	91,400	3,900,832	3,700	189,016
1876	188,700	645,364	97,700	4,283,915	3,400	142,358
1877	196,100	727,027	101,600	4,333,608	3,500	154,315
1878	221,900	707,861	107,000	5,080,485	3,500	178,185
1879	228,500	584,100	117,400	6,090,582	3,600	186,788
1880	239,900	895,331	120,622	6,136,235	3,528	212,774
1881	160,909	941,318	128,589	6,785,170	2,832	176,680
1882	168,964	927,557	135,450	7,134,661	2,890	196,130
1883	184,180	771,630	142,222	8,074,208	2,917	215,304
1884	187,843	706,280	149,333	8,337,261	2,946	189,444
1885	191,600	538,261	159,786	8,389,155	3,005	193,550
1886	229,920	656,423	167,775	9,045,603	3,155	229,068
1887	230,723	664,810	177,842	8,574,804	3,155	215,730
1888	225,137	1,165,064	181,300	9,181,806	3,218	202,813
1889	270,164	1,153,050	186,841	8,480,719	3,315	197,958
1890	229,630	936,928	181,236	8,598,230	3,647	229,618
1891	227,343	961,575	224,545	9,011,171	4,741	281,343
1892	204,609	912,760	204,509	13,479,667	4,755	219,503
1893	210,747	979,805	235,607	6,047,718	6,182	278,064
1894	229,714	917,936	235,607	5,183,941	6,182	202,464
1895	232,686	801,819	219,115	4,086,783	6,182	170,755
1896	240,061	567,864	208,777	3,704,688	5,811	127,404

PENNSYLVANIA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	788,900	\$36,817,963	760,900	\$31,508,899	1,762,500	\$5,569,500
1871	788,900	30,893,324	722,800	22,414,028	1,674,300	5,709,363
1872	796,700	28,282,860	715,500	21,558,015	1,691,000	6,222,880
1873	812,600	27,018,960	722,600	19,141,674	1,674,000	5,356,800
1874	828,800	29,356,086	722,600	20,456,906	1,674,000	6,059,880
1875	837,000	29,027,160	708,100	20,556,143	1,640,500	5,872,980
1876	845,900	29,162,860	701,000	18,233,010	1,607,600	5,086,022
1877	836,800	28,049,536	693,900	17,916,498	1,607,600	4,967,484
1878	828,400	16,783,384	687,000	16,199,480	1,666,000	4,981,940
1879	836,700	22,306,422	659,500	14,304,555	1,649,300	4,964,393
1880	828,393	21,735,458	626,525	14,692,011	1,632,807	5,339,279
1881	858,427	26,396,630	884,842	25,394,965	1,785,481	5,892,067
1882	867,011	31,117,025	875,994	26,069,581	1,808,336	6,564,143
1883	884,351	32,420,308	875,994	27,812,800	1,749,236	5,580,063
1884	893,185	30,413,290	875,994	26,761,617	1,486,851	4,609,238
1885	902,127	27,154,023	858,474	23,484,680	1,189,481	3,187,809
1886	911,148	26,423,232	867,059	22,063,198	1,094,323	3,072,859
1887	929,371	26,580,011	867,059	22,620,106	984,891	2,756,119
1888	929,371	25,613,465	869,680	21,344,240	935,646	2,884,783
1889	938,665	26,338,940	852,267	20,175,387	945,002	3,170,671
1890	919,892	24,533,320	835,222	18,965,976	1,089,502	3,858,631
1891	929,081	23,459,548	835,222	18,514,790	1,091,477	4,178,173
1892	933,382	24,163,387	793,461	17,491,915	1,637,216	6,047,876
1893	938,382	23,975,060	737,919	15,965,972	1,473,494	4,530,700
1894	938,382	23,046,662	686,265	14,118,804	1,178,735	2,804,309
1895	947,766	22,954,890	610,776	12,642,579	907,672	1,967,667
1896	938,288	24,329,806	568,022	12,278,880	798,751	2,209,984

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	1,047,800	\$11,230,272	540,700	\$57,811,644	25,200	\$3,330,232
1871	1,069,900	7,839,333	546,100	53,069,936	24,900	3,242,229
1872	1,088,900	8,841,868	546,100	55,953,406	24,900	3,196,168
1873	1,034,400	6,847,728	557,000	55,882,510	24,900	3,164,282
1874	930,900	9,122,820	573,700	53,790,112	25,600	3,017,984
1875	875,000	10,062,500	585,100	49,557,970	26,300	2,528,745
1876	901,200	8,543,370	590,900	44,707,494	26,000	2,351,820
1877	937,200	7,544,460	614,500	44,840,665	25,700	2,236,414
1878	927,600	5,371,062	614,500	40,735,205	24,900	1,967,518
1879	909,200	6,255,296	602,200	40,479,884	24,700	2,128,929
1880	909,200	6,391,676	602,200	43,779,940	22,453	1,896,829
1881	1,128,570	12,730,370	536,255	39,275,916	22,983	1,970,108
1882	1,090,556	9,802,009	546,980	49,485,281	23,213	2,462,203
1883	1,092,032	10,129,162	557,920	53,733,275	23,909	2,647,683
1884	1,114,336	9,402,411	574,658	55,822,278	23,909	2,682,267
1885	1,103,391	8,241,556	577,531	54,346,474	23,670	2,003,488
1886	1,070,289	7,750,178	583,306	55,337,063	23,670	2,615,091
1887	1,027,477	8,254,748	594,972	55,757,103	24,143	2,640,083
1888	1,037,752	8,383,271	600,622	57,121,786	24,264	2,670,223
1889	1,193,415	8,610,845	606,391	56,973,887	24,021	2,502,471
1890	1,157,613	8,334,815	570,515	51,937,861	24,021	2,514,778
1891	1,157,613	8,792,072	621,881	51,867,709	30,085	2,968,207
1892	1,076,880	9,572,736	626,080	49,289,489	30,210	2,738,204
1893	1,033,517	9,077,483	659,484	42,053,101	36,513	2,969,014
1894	1,012,647	7,319,038	646,294	31,684,068	36,578	2,312,026
1895	1,033,104	6,464,234	607,516	28,629,629	36,509	3,216,993
1896	1,022,773	6,822,816	583,215	25,819,103	36,144	2,125,529

RHODE ISLAND.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	21,900	\$980,075	18,800	\$975,903	30,000	\$111,300
1871	21,000	867,930	17,100	600,498	27,900	100,098
1872	20,700	879,750	16,900	890,968	27,900	149,544
1873	20,400	849,864	16,000	800,160	25,600	110,080
1874	21,400	902,700	16,000	800,640	25,300	113,850
1875	20,400	795,600	16,000	795,520	25,300	100,188
1876	20,400	765,000	15,600	719,472	25,000	92,500
1877	21,000	808,500	15,900	713,910	24,500	91,875
1878	22,000	729,000	14,300	378,235	24,500	85,015
1879	22,000	680,000	15,700	471,785	28,200	101,340
1880	22,000	680,000	15,700	471,785	28,200	104,340
1881	21,245	647,972	13,700	401,410	21,514	66,683
1882	21,882	787,752	13,563	489,624	21,729	66,916
1883	21,882	776,811	13,427	517,074	21,077	85,151
1884	22,101	806,687	13,024	488,857	20,866	79,082
1885	22,543	796,462	13,024	480,490	20,449	76,684
1886	22,656	804,288	13,154	432,243	20,245	73,540
1887	22,883	818,067	13,154	424,463	20,852	79,498
1888	23,341	770,253	13,549	418,799	20,435	72,851
1889	24,041	745,271	12,194	332,257	20,231	72,073
1890	24,281	801,273	11,950	318,713	20,433	83,000
1891	24,524	784,768	11,950	343,260	20,433	88,894
1892	24,279	728,370	11,831	317,651	12,200	51,615
1893	24,765	658,749	11,713	247,451	11,279	41,108
1894	25,013	725,377	11,596	275,782	11,279	31,468
1895	24,763	949,166	11,596	276,120	12,279	38,067
1896	24,763	742,890	10,784	261,892	10,715	30,136

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	20,400	\$288,248	15,300	\$1,502,307		
1871	18,500	194,065	14,000	1,368,714		
1872	18,100	217,200	14,700	1,474,410		
1873	17,100	234,612	14,700	1,608,915		
1874	16,500	256,875	14,700	1,590,420		
1875	16,300	277,915	14,700	1,438,687		
1876	17,100	235,980	14,500	1,371,990		
1877	18,100	245,255	16,200	1,512,270		
1878	15,400	141,680	16,200	1,003,500		
1879	13,800	129,060	16,200	1,530,900		
1880	13,800	129,060	16,200	1,530,900		
1881	14,282	181,127	9,758	781,713	46	84,404
1882	14,495	192,883	9,758	985,070	46	5,106
1883	14,540	173,133	9,758	1,000,976	46	5,152
1884	14,840	166,802	9,807	1,031,402		
1885	14,395	141,071	9,905	1,016,071		
1886	14,107	136,130	9,955	1,001,443		
1887	13,261	125,078	10,065	1,057,126		
1888	13,650	131,183	10,156	1,121,554		
1889	13,790	124,163	10,258	1,110,325		
1890	13,790	117,265	10,258	1,098,980		
1891	13,658	121,559	10,361	1,082,840		
1892	13,617	135,486	10,340	1,041,622		
1893	13,481	132,064	10,443	996,565		
1894	13,616	137,030	10,234	831,121		
1895	14,433	141,448	10,029	772,186		
1896	14,289	100,024	10,129	763,210		

SOUTH CAROLINA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	147,500	\$3,424,950	174,400	\$2,106,752	156,700	\$205,565
1871	154,800	3,681,020	179,600	2,401,232	153,500	203,185
1872	154,800	3,947,400	179,600	2,501,628	155,000	217,730
1873	157,800	3,432,664	184,900	2,104,162	153,400	223,790
1874	159,300	3,424,950	186,700	2,272,139	147,200	216,499
1875	150,300	3,146,175	186,700	2,182,523	142,700	203,287
1876	162,400	3,248,000	184,800	2,208,760	144,100	203,308
1877	150,000	2,275,000	180,000	1,865,800	175,000	215,030
1878	151,300	1,700,733	195,700	1,890,462	182,000	228,499
1879	132,000	2,082,150	191,800	2,017,736	176,500	210,640
1880	153,926	2,199,005	175,456	1,708,596	187,000	234,991
1881	139,182	2,296,503	221,590	2,541,637	120,078	204,128
1882	140,574	2,635,443	228,285	2,535,458	120,078	210,128
1883	137,763	3,076,248	216,880	2,548,340	116,476	194,515
1884	141,890	2,625,076	216,880	2,377,035	117,641	207,048
1885	143,315	2,836,208	214,711	2,400,180	112,935	194,220
1886	144,748	2,641,651	216,658	2,314,199	108,418	188,311
1887	146,135	2,777,705	212,521	2,651,335	107,334	184,400
1888	149,119	3,191,459	212,521	2,306,869	105,167	180,622
1889	156,575	3,350,705	210,596	2,767,004	102,031	189,268
1890	156,575	3,324,037	206,292	2,613,023	98,970	180,135
1891	155,000	3,148,223	204,126	2,481,043	98,073	167,908
1892	157,024	3,140,490	202,065	2,481,004	78,384	148,890
1893	126,619	2,571,421	181,668	1,959,390	78,384	123,000
1894	129,388	2,281,110	180,051	1,774,439	78,384	123,000
1895	129,388	2,134,080	158,450	1,601,246	74,465	109,788
1896	129,388	2,048,212	156,868	1,887,022	72,976	114,124

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	317,200	\$1,437,688	53,800	\$5,485,086	42,300	\$4,578,975
1871	330,400	1,120,020	54,800	5,198,328	43,900	4,947,091
1872	332,600	1,549,916	55,300	5,575,346	45,200	5,073,700
1873	322,600	1,271,044	56,400	5,499,564	45,200	5,078,294
1874	303,200	1,352,272	57,600	5,573,475	44,100	5,235,577
1875	275,900	1,133,949	56,900	5,040,302	44,700	4,304,939
1876	284,100	1,187,538	57,400	4,723,446	45,500	4,189,640
1877	459,000	1,570,500	57,900	4,673,088	50,000	4,544,000
1878	508,500	1,581,095	59,000	4,769,252	51,500	4,067,556
1879	544,000	1,528,640	62,000	4,940,780	53,000	4,811,340
1880	678,640	2,273,510	64,480	5,355,164	57,240	5,410,335
1881	500,506	2,539,176	60,267	4,369,847	67,675	5,998,235
1882	584,601	2,537,168	61,564	4,836,468	69,028	6,599,767
1883	578,755	2,419,196	60,948	5,892,453	69,718	7,167,010
1884	567,181	2,348,129	62,167	5,917,155	70,415	7,129,702
1885	567,181	1,927,962	62,789	5,589,481	71,119	6,999,978
1886	550,186	2,098,625	64,673	5,701,196	73,253	6,968,353
1887	559,100	2,159,072	65,966	5,940,100	75,451	7,204,052
1888	583,176	2,412,015	68,955	6,070,267	76,980	7,530,006
1889	670,652	2,646,125	70,303	6,180,143	79,289	7,064,364
1890	670,652	2,628,957	68,897	6,165,754	79,269	7,770,216
1891	684,065	2,827,924	69,629	5,285,433	86,403	8,257,164
1892	697,746	3,100,512	60,811	5,268,068	87,267	8,343,296
1893	767,521	4,165,799	62,635	5,139,853	95,994	9,202,744
1894	851,948	3,649,404	62,635	4,411,122	94,074	6,541,067
1895	945,662	4,090,933	64,514	3,806,977	95,955	7,071,063
1896	1,096,968	3,830,172	66,449	3,204,877	98,594	6,098,201

SOUTH DAKOTA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882						
1883						
1884						
1885						
1886						
1887						
1888						
1889						
1890						
1891	133,000	\$2,527,000	410,000	\$6,062,500	270,000	\$831,060
1892	223,500	3,967,125	389,500	6,335,725	324,000	1,066,608
1893	290,550	5,555,316	467,400	7,523,317	338,960	759,642
1894	278,928	4,900,765	425,334	6,368,775	323,482	532,089
1895	292,874	5,977,558	399,814	6,597,768	320,247	624,354
1896	313,375	7,185,689	427,801	8,568,564	336,250	731,161

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882						
1883						
1884						
1885						
1886						
1887						
1888						
1889						
1890						
1891	275,000	\$1,567,500	260,000	\$17,154,820	8,200	\$672,274
1892	239,250	1,960,654	233,800	18,629,858	8,200	629,546
1893	241,643	1,812,081	230,862	13,328,256	7,380	447,712
1894	173,968	1,012,408	233,771	8,608,620	6,937	259,361
1895	180,064	835,054	237,898	7,575,013	6,937	230,727
1896	158,463	606,128	230,775	7,708,063	6,680	206,060

NOTE.—Returns not separate previous to 1891. (See Dakota Territory.)

TENNESSEE.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	233,800	\$5,505,952	338,100	\$4,993,737	400,000	\$664,000
1871	242,900	5,545,407	348,200	4,833,016	322,000	682,080
1872	247,700	5,355,458	351,000	4,806,272	372,400	718,732
1873	247,700	5,414,722	355,100	5,049,522	350,000	731,500
1874	242,700	4,375,851	340,800	3,878,804	325,500	651,000
1875	225,700	4,701,331	323,000	3,945,903	341,700	729,987
1876	225,700	4,247,674	317,200	3,453,824	345,100	699,651
1877	248,200	4,681,052	450,000	4,774,500	350,000	1,632,000
1878	245,700	3,886,974	414,000	3,841,620	858,500	1,297,750
1879	248,100	4,240,029	367,400	4,347,556	858,500	1,373,000
1880	255,543	4,332,562	377,530	4,439,753	858,500	1,322,080
1881	300,794	5,363,157	470,208	6,451,228	675,478	1,148,313
1882	306,810	6,903,225	485,504	7,232,270	605,478	1,229,370
1883	313,742	7,379,212	486,084	7,802,246	655,214	1,172,833
1884	320,017	7,523,600	496,084	7,471,327	635,558	1,137,640
1885	326,417	6,528,340	475,406	6,336,604	603,780	967,255
1886	338,210	7,060,410	470,652	6,619,257	561,515	846,877
1887	339,572	6,706,547	461,239	5,815,073	516,594	832,440
1888	368,738	7,019,365	475,076	6,109,182	526,926	907,261
1889	377,740	6,414,025	484,578	5,680,645	511,118	968,722
1890	366,408	6,086,037	480,349	4,798,495	511,118	1,055,663
1891	373,736	6,166,644	469,556	4,921,187	506,007	1,105,879
1892	389,909	5,975,484	460,165	4,483,008	541,427	1,230,285
1893	351,499	5,782,150	575,208	6,006,704	519,770	939,952
1894	344,469	5,280,710	546,446	5,198,999	493,782	767,633
1895	300,660	5,135,616	519,124	5,483,215	430,466	651,068
1896	307,542	4,899,144	456,829	4,907,805	382,335	549,836

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	1,520,000	\$6,824,800	280,000	\$23,654,400	94,600	\$9,961,246
1871	1,580,800	5,248,256	291,200	24,090,977	98,300	9,348,330
1872	1,598,600	5,396,508	294,100	23,492,708	100,200	9,345,654
1873	1,420,900	4,380,531	302,900	23,477,779	103,200	9,374,688
1874	1,193,500	4,105,640	318,000	20,746,320	107,300	7,894,061
1875	1,020,400	5,357,808	318,000	19,919,520	101,900	6,910,858
1876	1,067,900	4,688,849	321,100	17,750,408	99,800	5,976,024
1877	1,900,000	7,714,000	327,500	17,328,025	101,700	5,777,577
1878	1,900,000	4,218,000	323,700	14,242,800	99,700	4,926,177
1879	1,710,000	5,865,300	326,900	16,263,275	96,700	5,406,497
1880	1,623,500	5,227,070	320,302	17,293,141	96,700	6,315,477
1881	2,050,261	9,328,688	206,651	14,025,943	172,968	12,566,125
1882	1,988,753	11,047,467	269,318	17,551,454	176,427	13,410,216
1883	2,127,966	8,873,618	274,704	19,569,913	178,191	13,825,840
1884	2,021,568	8,126,703	282,045	19,862,739	183,537	14,018,556
1885	2,122,646	6,788,222	288,604	18,966,758	187,208	13,046,443
1886	1,910,381	5,022,181	294,376	19,667,265	190,952	13,521,572
1887	1,853,070	6,774,825	300,284	20,693,234	194,771	14,236,651
1888	2,038,377	8,095,620	306,289	22,032,245	208,405	14,933,102
1889	2,242,215	7,932,059	303,206	21,452,283	229,246	16,337,062
1890	2,287,059	7,500,293	300,174	21,207,056	224,661	16,551,569
1891	2,287,059	7,741,239	312,181	21,522,778	222,414	15,891,389
1892	1,860,741	9,330,843	321,546	20,424,024	220,190	14,084,257
1893	1,930,049	9,265,780	334,408	18,839,082	198,171	11,675,375
1894	1,930,049	7,002,990	344,440	15,007,500	200,153	9,142,760
1895	1,910,749	6,384,190	344,440	13,758,944	182,139	7,666,823
1896	1,796,104	5,978,152	337,551	12,200,744	169,389	6,635,682

TEXAS.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.					
	Milch cows.		Other cattle.		Sheep.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	596,500	\$7,653,085	3,220,000	\$23,731,400	1,137,300	\$1,502,220
1871	602,400	8,506,888	3,123,400	25,299,540	1,239,600	1,844,182
1872	596,200	7,643,700	2,842,200	21,344,022	1,239,600	2,231,290
1873	526,500	8,029,125	2,415,800	19,543,822	1,338,700	2,704,174
1874	520,500	7,018,245	2,867,400	17,755,500	1,445,700	2,775,744
1875	500,100	7,891,672	2,343,700	22,439,309	1,691,400	3,982,800
1876	505,100	7,536,108	3,980,500	31,328,220	2,826,700	5,766,468
1877	550,000	8,112,500	3,458,800	35,020,490	3,674,700	7,680,123
1878	544,500	7,911,585	4,800,000	43,920,000	4,560,000	8,208,000
1879	568,300	7,843,255	4,460,000	39,640,320	5,148,400	9,730,476
1880	566,300	8,013,145	4,072,240	41,353,236	6,023,628	12,318,437
1881	600,650	10,197,804	3,443,784	42,014,165	6,850,000	14,385,000
1882	660,715	14,358,588	4,410,000	65,223,900	7,877,500	18,960,000
1883	667,501	16,353,774	4,277,700	74,902,527	7,956,275	17,822,056
1884	700,876	16,821,024	4,234,023	66,784,736	7,558,461	14,738,560
1885	700,876	14,230,774	4,023,177	52,268,087	6,892,615	11,582,812
1886	735,920	11,658,973	6,039,780	73,292,232	4,761,891	7,718,028
1887	772,716	10,972,507	6,309,504	63,077,993	4,523,739	6,844,774
1888	826,808	11,202,436	7,089,884	65,907,346	4,659,451	6,749,215
1889	843,342	11,953,289	7,167,653	65,294,283	4,732,640	7,230,096
1890	851,775	12,035,581	7,024,086	62,444,300	4,990,272	7,691,682
1891	868,811	12,880,557	7,024,086	62,177,330	5,040,175	7,898,230
1892	916,682	11,841,859	6,482,530	58,512,448	4,334,551	6,924,445
1893	806,515	11,189,848	6,591,787	62,094,840	3,814,405	5,075,005
1894	816,000	11,808,036	6,064,444	50,081,024	3,738,117	4,541,812
1895	793,036	14,024,615	5,518,644	60,520,010	3,065,256	3,830,540
1896	732,579	12,364,873	5,242,712	58,417,443	2,780,383	3,550,607

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	1,200,000	\$3,312,000	615,700	\$19,890,953	82,900	\$4,385,650
1871	1,272,000	3,421,680	640,300	21,328,383	87,000	4,265,580
1872	1,233,800	3,578,020	672,300	25,150,743	92,200	5,200,300
1873	1,147,400	3,821,564	609,100	26,635,710	97,700	5,556,199
1874	1,147,400	3,155,350	720,000	23,457,000	101,600	4,804,664
1875	1,060,000	4,458,100	770,400	25,554,168	110,700	5,032,413
1876	1,144,500	4,715,340	785,800	23,754,734	112,900	5,579,518
1877	1,716,700	6,300,289	725,000	19,901,250	160,000	7,147,200
1878	1,957,000	5,694,870	918,000	20,583,200	180,200	7,249,446
1879	1,817,800	4,635,390	963,900	21,331,107	191,000	7,691,440
1880	2,035,900	6,372,307	1,002,456	26,885,821	202,400	9,041,864
1881	1,896,300	6,352,605	838,343	20,761,176	130,210	7,290,693
1882	1,953,189	7,773,692	880,260	33,168,197	143,386	7,527,765
1883	2,011,785	7,685,019	889,063	34,557,879	149,121	8,842,875
1884	2,233,081	8,128,415	933,516	37,854,074	164,033	9,448,301
1885	2,411,727	6,656,507	998,862	35,851,466	175,515	9,560,081
1886	2,532,313	7,020,470	1,038,816	31,642,055	186,046	9,637,232
1887	2,279,082	6,436,128	1,225,803	38,115,135	193,488	10,032,254
1888	2,210,710	8,083,600	1,323,867	43,973,694	208,967	11,231,342
1889	2,321,246	8,073,292	1,350,344	41,527,176	213,146	11,343,579
1890	2,321,246	6,569,126	1,512,385	49,613,323	215,277	11,032,965
1891	2,321,246	7,311,824	1,209,908	38,082,747	230,230	12,272,852
1892	2,344,458	9,040,608	1,246,205	36,151,400	241,751	11,875,567
1893	2,555,450	10,973,142	1,183,895	32,203,376	253,830	11,351,535
1894	2,734,341	10,111,592	1,195,734	25,198,043	261,454	9,236,418
1895	3,035,119	10,890,078	1,183,777	24,528,683	364,069	9,125,296
1896	2,944,085	7,301,281	1,160,101	20,571,982	261,428	7,790,259

UTAH.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	85,070	\$987,922	108,000	\$2,371,060	513,000	\$1,179,900
1883	38,473	1,351,172	132,180	3,157,780	584,300	1,397,800
1884	40,012	1,360,408	145,396	3,560,797	620,730	1,315,943
1885	42,013	1,296,521	162,846	3,888,586	651,767	1,356,586
1886	44,534	1,336,020	219,842	4,498,671	658,235	1,343,082
1887	49,873	1,259,420	435,000	7,292,733	1,335,000	2,594,173
1888	51,873	1,353,885	421,950	6,501,162	1,468,500	2,793,674
1889	52,910	1,169,311	426,170	5,999,615	2,065,900	4,231,617
1890	52,910	1,100,528	383,553	5,258,518	2,065,900	5,070,281
1891	54,497	1,210,378	402,731	5,679,512	2,065,900	4,650,406
1892	55,042	1,321,008	390,649	5,305,016	2,117,577	5,098,023
1893	56,143	1,010,574	351,584	4,075,882	1,905,819	3,098,480
1894	56,704	553,996	358,616	4,184,966	2,039,226	2,998,895
1895	57,271	870,519	369,374	4,253,114	1,998,441	3,157,532
1896	56,686	1,017,729	358,293	4,933,162	1,998,441	3,036,830

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	22,500	\$279,450	44,100	\$2,140,173	3,060	\$215,086
1883	24,525	224,404	48,510	2,332,174	3,152	197,725
1884	26,242	243,526	50,936	2,269,708	3,247	203,793
1885	27,554	197,357	52,464	2,440,808	3,409	214,554
1886	28,666	237,052	56,136	2,466,490	3,579	215,963
1887	40,118	286,846	120,692	4,906,026	3,698	201,686
1888	50,148	432,939	132,701	4,531,358	4,055	192,303
1889	47,641	326,819	130,399	4,838,522	4,055	178,943
1890	47,641	350,490	90,609	3,315,151	4,055	177,397
1891	48,594	416,274	67,957	2,414,946	2,028	111,369
1892	47,130	417,624	76,791	2,396,948	1,825	57,748
1893	51,850	438,887	69,112	1,516,265	1,789	56,123
1894	54,443	386,200	69,803	1,129,671	1,789	45,731
1895	56,021	393,671	71,897	902,149	1,735	40,865
1896	53,700	293,382	71,178	1,207,941	1,648	40,284

NOTE.—Returns from Utah previous to 1882 were included with Nevada, Colorado, and the Territories.

VERMONT.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	193,900	\$9,210,250	140,600	\$6,017,680	548,000	\$1,435,760
1871	191,900	7,027,378	139,700	4,143,190	580,800	2,474,208
1872	186,700	6,914,061	130,700	5,047,634	604,000	2,434,120
1873	186,700	6,947,350	128,000	4,208,640	543,600	1,951,524
1874	201,500	7,334,600	130,500	4,022,010	516,400	2,029,452
1875	200,500	7,000,150	130,500	3,827,565	490,500	1,834,470
1876	215,700	9,255,300	131,800	3,077,530	475,700	1,350,988
1877	217,800	8,370,650	130,400	2,993,664	461,400	1,301,148
1878	217,800	5,445,000	127,800	2,700,414	460,000	1,688,280
1879	207,100	5,187,855	126,500	2,660,395	498,800	1,735,128
1880	200,847	4,881,554	125,235	2,696,310	508,572	1,688,450
1881	221,474	5,667,174	187,933	4,679,532	444,289	1,466,088
1882	225,801	6,848,544	187,933	6,181,116	448,712	2,046,127
1883	230,317	7,139,827	187,933	6,184,875	448,712	2,032,605
1884	225,711	5,568,486	180,416	5,120,306	385,892	1,142,240
1885	218,948	6,208,252	176,808	4,607,683	378,174	1,082,031
1886	221,129	6,019,131	178,576	4,805,493	378,174	1,061,459
1887	225,552	6,473,342	180,362	5,059,698	363,301	1,120,279
1888	232,319	6,086,758	185,773	4,771,593	365,770	1,111,941
1889	234,642	5,572,748	169,053	3,834,563	362,112	1,070,114
1890	234,642	5,514,067	167,302	3,582,884	351,249	1,006,038
1891	239,335	5,823,021	165,088	3,687,796	358,274	1,179,725
1892	238,856	5,644,107	100,717	3,346,122	329,612	1,199,392
1893	246,022	6,212,066	152,681	3,003,164	230,170	604,719
1894	253,408	6,925,504	146,574	3,639,814	226,938	393,464
1895	258,471	6,415,250	143,643	3,044,576	181,550	349,593
1896	263,640	6,477,635	137,897	2,646,257	157,948	318,423

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	66,700	\$1,133,900	71,000	\$6,921,730		
1871	61,300	583,576	71,000	6,750,680		
1872	56,200	556,362	71,000	6,623,530		
1873	53,500	513,065	71,000	6,049,300		
1874	52,400	655,000	72,400	6,619,532		
1875	51,800	631,442	74,500	6,201,380		
1876	53,300	549,523	75,200	5,329,424		
1877	54,300	434,400	75,900	4,919,538		
1878	50,500	250,880	77,400	4,486,104		
1879	49,430	375,934	77,400	4,918,770		
1880	49,400	406,562	77,400	4,748,480		
1881	75,620	843,163	75,067	4,717,551	286	\$25,025
1882	74,894	873,683	76,119	5,502,643	295	20,777
1883	74,894	646,825	76,540	6,024,517	300	27,000
1884	74,115	619,601	77,049	6,353,852		
1885	74,115	511,112	79,202	6,627,571		
1886	74,850	589,688	82,370	6,789,071		
1887	76,253	698,385	84,841	7,145,111		
1888	77,117	714,486	86,962	7,283,194		
1889	77,888	667,682	84,253	6,718,276		
1890	75,551	554,210	84,353	6,696,246		
1891	74,795	537,412	90,258	6,894,201		
1892	74,047	751,205	92,906	6,352,990		
1893	76,268	695,032	91,825	5,171,851		
1894	77,081	730,007	93,877	4,304,596		
1895	78,572	582,900	91,909	4,070,381		
1896	76,215	555,701	88,319	3,977,151		

VIRGINIA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	229,500	\$8,678,155	397,800	\$8,480,062	394,800	\$935,676
1871	234,000	5,853,620	405,700	6,982,097	386,900	1,044,630
1872	234,000	5,543,480	405,700	6,844,159	386,900	1,176,176
1873	234,000	5,148,000	405,700	6,978,040	387,500	1,065,750
1874	229,300	5,290,142	397,500	6,189,200	387,500	1,085,150
1875	227,000	5,168,790	397,500	6,701,850	356,400	1,044,252
1876	229,200	5,014,896	393,500	6,736,720	367,000	1,031,270
1877	240,600	5,122,374	431,100	6,589,693	422,000	1,088,790
1878	238,200	4,261,988	431,100	6,350,101	417,800	923,338
1879	240,000	4,537,716	431,100	6,686,381	426,100	950,273
1880	243,006	4,677,885	431,100	7,324,389	447,405	1,199,045
1881	240,631	4,714,368	429,829	7,025,166	502,262	1,245,610
1882	245,353	5,424,755	441,232	8,865,526	502,262	1,371,175
1883	245,353	5,606,316	436,820	8,976,651	487,194	1,256,961
1884	247,807	6,024,188	432,452	8,986,353	477,450	1,250,919
1885	247,807	5,494,671	423,803	7,804,759	463,127	1,035,822
1886	255,241	5,670,543	428,041	7,958,353	449,228	1,034,134
1887	257,793	5,542,550	423,761	7,390,725	444,741	1,078,678
1888	259,082	5,342,271	419,523	7,245,100	435,846	1,085,257
1889	272,036	5,244,854	419,523	6,589,393	444,563	1,151,063
1890	277,477	6,018,476	419,523	6,976,457	444,563	1,293,720
1891	280,232	6,235,607	419,523	7,223,456	449,000	1,370,016
1892	279,417	5,588,220	405,937	6,551,606	496,400	1,497,194
1893	278,611	5,601,235	411,006	6,206,936	488,432	1,217,651
1894	273,851	5,014,212	394,566	5,731,856	449,367	974,027
1895	285,635	4,818,619	386,670	6,138,896	426,889	894,790
1896	300,322	4,657,161	371,208	5,723,380	392,738	849,774

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	757,500	\$4,242,000	178,500	\$15,180,005	29,400	\$3,202,542
1871	810,500	2,901,590	183,800	14,369,484	29,400	3,246,349
1872	818,600	3,004,262	185,600	15,139,392	29,400	3,213,420
1873	753,100	2,643,381	189,300	14,371,656	29,600	3,073,368
1874	693,700	2,717,070	191,100	13,801,242	29,800	2,896,558
1875	589,800	2,024,610	194,900	13,551,397	29,800	2,550,840
1876	607,400	2,781,862	198,700	12,824,088	29,800	2,396,716
1877	759,300	2,006,432	204,600	12,807,960	31,200	2,353,912
1878	713,600	1,969,536	208,700	10,908,490	30,600	1,942,488
1879	692,100	2,422,350	212,900	12,075,088	30,300	2,042,321
1880	950,800	3,735,644	227,803	13,595,283	31,612	2,258,045
1881	889,499	4,180,645	221,026	13,314,006	33,934	2,456,482
1882	773,894	4,147,911	221,468	15,779,585	34,002	3,345,797
1883	820,286	3,478,055	225,897	16,562,768	34,002	3,000,117
1884	795,687	3,421,454	229,285	16,764,497	34,342	3,057,125
1885	875,255	3,206,063	223,871	16,297,669	34,342	2,237,286
1886	787,730	3,237,570	228,548	16,725,673	35,372	3,058,086
1887	811,362	3,621,313	243,310	17,249,636	35,726	3,121,130
1888	827,589	3,484,485	240,909	17,406,865	36,683	3,193,125
1889	1,030,659	3,033,704	259,317	18,172,031	36,083	3,116,584
1890	969,273	3,426,381	243,758	17,781,386	36,444	3,214,853
1891	978,906	3,596,722	240,196	18,407,152	37,173	3,219,391
1892	929,228	3,772,013	248,658	17,135,626	37,545	3,109,067
1893	920,228	4,060,044	251,145	14,074,839	39,422	2,756,406
1894	937,037	4,041,567	253,636	11,327,410	38,634	2,244,254
1895	985,748	3,798,514	246,040	9,806,229	38,248	2,134,133
1896	996,005	3,361,164	249,586	8,870,390	37,488	1,620,880

WASHINGTON.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	31,300	\$978,432	117,300	\$2,814,027	380,000	\$855,500
1883	45,632	1,665,568	220,376	5,722,540	456,300	1,090,557
1884	51,108	1,712,118	253,414	6,979,022	531,871	1,270,623
1885	56,730	1,815,360	286,358	7,445,308	544,548	1,223,491
1886	62,403	2,059,290	300,676	7,047,849	555,439	1,110,878
1887	65,523	2,181,916	300,676	7,060,177	549,885	1,068,976
1888	73,731	2,509,220	315,710	7,913,901	560,883	1,034,829
1889	83,641	3,001,875	369,381	8,684,635	673,060	1,545,346
1890	92,005	3,404,185	443,257	9,293,106	673,060	1,763,687
1891	96,005	3,381,175	447,690	9,345,532	686,521	1,858,824
1892	101,436	3,347,355	429,782	9,496,673	823,825	2,328,139
1893	108,536	3,117,125	408,293	8,487,108	823,063	1,949,796
1894	113,962	2,835,375	428,708	6,887,672	748,857	1,304,390
1895	117,381	2,591,772	381,550	5,803,002	756,346	1,318,462
1896	120,902	2,830,361	351,926	5,301,221	741,219	1,375,851

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	50,300	\$272,626	55,640	\$3,410,732	840	\$80,234
1883	51,827	423,813	68,094	4,738,508	874	75,050
1884	63,509	490,712	73,824	4,783,657	961	80,705
1885	66,779	321,286	81,945	5,526,821	1,009	85,765
1886	90,152	384,049	94,257	6,018,458	1,231	102,247
1887	91,684	455,997	96,122	5,955,637	1,243	90,529
1888	95,007	542,058	98,044	6,357,229	1,243	104,397
1889	143,411	785,802	118,653	7,537,475	1,268	108,060
1890	147,713	688,052	148,291	10,384,619	1,306	116,893
1891	152,144	687,470	170,535	10,018,740	1,371	96,108
1892	158,230	1,208,878	196,115	11,683,903	1,378	93,017
1893	162,977	1,897,678	196,078	8,040,067	1,392	96,295
1894	211,870	1,189,268	200,057	6,457,895	1,392	56,616
1895	236,418	1,041,160	182,055	5,574,956	1,420	56,064
1896	210,688	700,310	176,061	3,616,227	1,420	55,677

NOTE.—Returns from Washington previous to 1882 were included with Nevada, Colorado, and the Territories.

SOUTH CAROLINA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	147,500	\$3,424,950	174,400	\$2,106,752	156,700	\$365,585
1871	154,600	3,661,020	179,600	2,401,252	153,500	383,125
1872	154,800	3,947,400	179,600	2,501,828	155,000	317,750
1873	157,800	3,452,064	184,900	2,104,162	153,400	284,700
1874	159,300	3,424,950	186,700	2,272,139	147,200	316,450
1875	159,300	3,146,175	186,700	2,182,323	142,700	255,257
1876	162,400	3,248,000	181,800	2,208,360	144,100	252,300
1877	130,000	2,275,000	190,000	1,865,600	175,000	202,000
1878	131,300	1,760,733	195,700	1,890,462	182,000	206,450
1879	132,600	2,022,150	191,800	2,017,736	176,500	210,640
1880	133,926	2,194,005	175,456	1,768,596	167,000	204,601
1881	139,182	2,296,503	221,580	2,541,637	120,078	204,128
1882	140,574	2,655,443	223,285	2,335,458	120,078	204,128
1883	137,763	3,076,248	216,880	2,548,340	116,476	194,515
1884	141,896	2,625,076	216,880	2,377,005	117,641	207,068
1885	143,315	2,850,298	214,711	2,400,120	112,935	194,320
1886	144,748	2,641,651	216,858	2,314,199	108,418	194,320
1887	146,155	2,777,705	212,521	2,651,835	107,334	184,400
1888	149,119	3,131,499	212,521	2,806,869	105,187	180,823
1889	156,575	3,350,705	210,586	2,767,004	102,031	180,125
1890	156,575	3,324,087	208,282	2,613,023	98,970	167,003
1891	155,069	3,148,233	204,126	2,629,043	86,073	147,808
1892	157,024	3,140,490	202,085	2,481,004	78,334	123,600
1893	125,619	2,571,421	161,668	1,955,590	76,334	123,600
1894	129,368	2,281,110	160,051	1,774,439	73,334	123,600
1895	129,368	2,184,069	158,450	1,601,546	74,465	109,762
1896	129,368	2,048,212	156,866	1,387,622	72,976	114,124

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	317,200	\$1,437,668	53,800	\$5,485,966	42,300	\$4,578,955
1871	339,400	1,120,020	54,800	5,198,328	43,900	4,947,061
1872	332,600	1,549,916	55,300	5,575,346	45,200	5,073,700
1873	322,600	1,271,044	56,400	5,499,564	45,200	5,076,864
1874	303,200	1,352,272	57,500	5,573,475	44,100	5,235,577
1875	275,900	1,133,940	56,900	5,040,202	44,700	4,204,929
1876	284,100	1,187,538	57,400	4,723,446	45,500	4,189,640
1877	459,000	1,570,500	57,900	4,673,088	50,000	4,546,000
1878	508,500	1,561,065	59,600	4,760,252	51,500	4,097,855
1879	544,000	1,528,640	62,000	4,940,780	53,000	4,811,340
1880	676,640	2,273,510	64,480	5,355,164	57,240	5,410,325
1881	590,506	2,539,176	60,367	4,369,847	67,675	5,698,235
1882	584,601	2,537,168	61,584	4,836,468	69,028	6,569,767
1883	578,755	2,419,106	60,948	5,392,453	69,718	7,167,010
1884	567,181	2,348,120	62,167	5,917,155	70,415	7,126,702
1885	567,181	1,927,962	62,789	5,586,481	71,119	6,990,978
1886	550,166	2,086,625	64,673	5,701,026	73,253	6,888,383
1887	550,166	2,159,072	65,966	5,940,100	75,451	7,206,652
1888	583,178	2,412,015	68,955	6,070,267	76,980	7,520,098
1889	670,652	2,646,125	70,303	6,180,143	79,289	7,664,256
1890	670,652	2,628,957	68,897	6,165,754	79,289	7,770,216
1891	694,065	2,827,924	60,629	5,285,433	86,403	8,257,164
1892	697,746	3,130,512	60,811	5,268,088	87,267	8,343,293
1893	767,521	4,165,799	62,635	5,130,853	95,994	9,208,744
1894	851,948	3,646,404	62,635	4,411,122	94,074	6,541,667
1895	945,662	4,090,933	64,514	3,806,977	95,955	7,071,663
1896	1,096,968	3,830,172	66,449	3,204,577	98,834	6,066,201

SOUTH DAKOTA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882						
1883						
1884						
1885						
1886						
1887						
1888						
1889						
1890						
1891	133,000	\$2,527,000	410,000	\$6,632,500	270,000	\$831,060
1892	223,500	3,967,125	389,500	6,333,725	324,000	1,006,006
1893	290,550	5,555,316	467,400	7,523,317	336,960	759,642
1894	278,938	4,900,765	425,324	6,308,775	323,482	532,069
1895	292,874	5,977,558	309,814	6,507,768	320,247	624,354
1896	313,375	7,185,689	427,801	8,568,564	330,250	731,161

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882						
1883						
1884						
1885						
1886						
1887						
1888						
1889						
1890						
1891	275,000	\$1,507,500	260,000	\$17,154,826	8,200	\$672,274
1892	239,250	1,900,654	203,800	18,620,858	8,200	620,546
1893	241,643	1,812,081	200,802	13,323,256	7,380	447,712
1894	173,968	1,012,408	203,771	8,008,620	6,937	250,361
1895	160,064	835,054	207,806	7,575,013	6,937	230,727
1896	158,463	606,128	200,775	7,708,063	6,660	206,090

NOTE.—Returns not separate previous to 1891. (See Dakota Territory.)

TENNESSEE.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	233,600	\$5,505,952	338,100	\$4,993,737	400,000	\$664,000
1871	242,900	5,545,407	348,200	4,833,016	382,000	682,080
1872	247,700	5,335,458	351,000	4,806,372	372,400	718,732
1873	247,700	5,414,722	355,100	5,049,522	350,000	731,500
1874	242,700	4,375,881	340,800	3,875,304	325,500	651,000
1875	225,700	4,701,331	323,700	3,945,903	341,700	720,987
1876	225,700	4,247,674	317,200	3,467,824	345,100	695,651
1877	248,200	4,681,052	450,000	4,774,500	850,000	1,632,000
1878	245,700	3,886,974	414,000	3,841,920	858,500	1,267,750
1879	248,100	4,240,029	397,400	4,347,556	858,500	1,373,000
1880	255,543	4,382,582	377,530	4,430,753	858,500	1,322,080
1881	300,794	5,363,157	470,206	6,451,226	675,478	1,148,313
1882	306,810	6,903,225	485,504	7,292,270	605,478	1,229,370
1883	313,742	7,379,212	466,084	7,802,246	655,214	1,172,833
1884	320,017	7,523,000	466,084	7,471,327	635,558	1,137,649
1885	326,417	6,528,340	475,406	6,398,604	603,780	967,255
1886	336,210	7,060,410	470,652	6,619,257	561,615	846,877
1887	339,572	6,706,547	461,239	5,815,073	516,594	832,440
1888	366,738	7,019,385	475,076	6,109,192	526,926	907,261
1889	377,740	6,414,025	484,578	5,680,045	511,118	908,722
1890	366,408	6,086,037	460,349	4,798,495	511,118	1,055,685
1891	373,736	6,166,044	460,556	4,921,187	506,007	1,105,879
1892	389,990	5,975,484	460,165	4,493,008	541,427	1,220,245
1893	351,499	5,782,150	575,206	6,006,704	519,770	939,952
1894	344,469	5,280,710	546,446	5,198,999	493,782	767,633
1895	330,600	5,135,616	519,124	5,493,215	436,466	651,068
1896	307,542	4,899,144	456,829	4,907,805	382,335	549,836

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	1,520,000	\$6,824,800	280,000	\$23,654,400	94,600	\$9,981,246
1871	1,580,800	5,248,256	291,200	24,060,977	98,300	9,348,330
1872	1,596,000	5,396,508	294,100	23,492,708	100,200	9,345,654
1873	1,420,000	4,300,581	302,900	23,477,770	103,200	9,374,688
1874	1,193,500	4,105,640	318,000	20,748,320	107,300	7,894,061
1875	1,026,400	5,357,808	318,000	19,919,520	101,900	6,910,858
1876	1,087,000	4,688,849	321,100	17,750,408	99,800	5,976,024
1877	1,900,000	7,714,000	327,500	17,328,025	101,700	5,777,577
1878	1,900,000	4,218,000	323,700	14,242,800	99,700	4,928,177
1879	1,710,000	5,865,300	326,000	16,263,275	96,700	5,406,497
1880	1,623,500	5,227,670	320,362	17,293,141	96,700	6,315,477
1881	2,050,261	9,328,688	266,651	14,025,843	172,968	12,566,125
1882	1,988,753	11,047,467	269,318	17,551,454	176,427	13,410,216
1883	2,127,666	8,873,618	274,704	19,569,913	178,191	13,825,840
1884	2,021,568	8,126,703	282,945	19,862,739	183,537	14,018,556
1885	2,122,446	6,788,222	238,604	18,966,758	187,208	13,046,443
1886	1,910,381	5,022,181	294,376	19,667,365	190,952	13,521,572
1887	1,853,070	6,774,825	300,264	20,680,234	194,771	14,236,061
1888	2,038,377	8,065,620	306,299	22,032,245	208,405	14,933,102
1889	2,242,215	7,932,059	303,206	21,452,283	220,246	16,327,002
1890	2,287,050	7,590,293	300,174	21,207,056	224,661	16,551,509
1891	2,287,059	7,741,239	312,181	21,522,778	222,414	15,891,399
1892	1,989,741	9,339,843	321,546	20,424,624	220,190	14,084,257
1893	1,930,049	9,265,780	334,408	18,839,662	198,171	11,675,375
1894	1,930,049	7,002,990	344,440	15,007,500	200,153	9,142,760
1895	1,910,749	6,384,190	344,440	13,758,944	182,139	7,659,823
1896	1,796,104	5,978,152	337,551	12,290,744	169,389	6,635,682

TEXAS.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.					
	Milch cows.		Other cattle.		Sheep.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	596,500	\$7,653,095	3,220,000	\$23,731,400	1,137,300	\$1,502,220
1871	602,400	8,505,888	3,123,400	25,299,540	1,239,000	1,844,182
1872	596,200	7,643,700	2,842,200	21,344,022	1,230,000	2,231,290
1873	526,500	8,029,125	2,415,800	19,543,822	1,339,700	2,704,174
1874	526,500	7,018,245	2,367,400	17,755,500	1,445,700	2,775,744
1875	510,100	7,861,572	2,343,700	22,429,209	1,691,400	3,392,800
1876	505,100	7,339,103	3,390,500	31,328,230	2,826,700	5,706,408
1877	550,000	8,112,500	3,458,300	35,030,490	3,674,700	7,080,123
1878	544,500	7,011,585	4,800,000	43,930,000	4,590,000	8,208,000
1879	566,300	7,843,255	4,464,000	39,640,320	5,148,400	9,730,476
1880	566,300	8,013,145	4,072,240	41,333,236	6,023,028	12,348,437
1881	600,650	10,907,804	3,443,784	42,014,165	6,850,000	14,365,000
1882	680,715	14,958,588	4,410,000	65,223,900	7,877,500	18,008,000
1883	667,501	16,353,774	4,277,700	74,902,527	7,956,275	17,822,066
1884	700,876	16,821,024	4,234,023	66,784,736	7,558,461	14,738,969
1885	700,876	14,220,774	4,023,177	52,298,067	6,892,015	11,582,812
1886	735,920	11,656,973	6,034,766	73,292,232	4,761,831	7,718,928
1887	772,716	10,972,567	6,336,504	63,077,903	4,523,739	6,844,774
1888	826,803	11,302,436	7,096,884	65,907,346	4,659,451	6,749,215
1889	843,342	11,033,280	7,167,853	63,294,253	4,752,640	7,230,696
1890	851,775	12,063,581	7,024,496	62,444,290	4,990,272	7,601,062
1891	868,811	12,380,557	7,024,496	62,177,330	5,040,175	7,808,239
1892	816,082	11,841,889	6,462,736	58,512,448	4,334,551	6,924,445
1893	808,515	11,180,848	6,591,787	62,604,840	3,814,405	5,075,065
1894	816,600	11,808,036	6,064,444	59,081,024	3,738,117	4,541,812
1895	783,936	14,024,615	5,518,444	60,520,010	3,065,250	3,830,540
1896	752,579	12,364,873	5,242,712	58,417,413	2,780,383	3,550,007

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	1,200,000	\$3,312,000	615,700	\$19,890,953	82,900	\$4,335,670
1871	1,272,000	3,421,680	640,300	21,328,383	87,000	4,205,580
1872	1,233,800	3,578,020	672,900	25,150,743	92,200	5,200,900
1873	1,147,400	3,821,564	693,100	26,035,710	97,700	5,550,160
1874	1,147,400	3,155,350	720,000	23,457,000	101,600	4,804,064
1875	1,060,000	4,459,100	770,400	25,554,168	110,700	5,032,413
1876	1,144,500	4,715,340	785,800	23,754,734	112,900	5,570,518
1877	1,716,700	6,300,269	725,000	19,991,250	160,000	7,147,200
1878	1,957,000	5,094,370	918,000	20,593,200	180,200	7,249,446
1879	1,817,800	4,635,380	963,000	21,351,107	191,000	7,991,440
1880	2,035,900	6,372,367	1,002,456	26,895,821	202,400	9,041,894
1881	1,896,300	6,355,005	938,343	20,761,176	159,210	7,280,083
1882	2,051,189	7,773,082	880,230	33,138,197	143,396	7,527,765
1883	2,051,785	7,985,019	880,063	34,557,870	149,121	8,842,875
1884	2,231,081	8,128,415	933,516	37,834,074	164,053	9,448,301
1885	2,411,727	6,056,367	908,862	35,851,466	175,515	9,593,081
1886	2,532,313	7,090,476	1,038,816	33,642,055	186,046	9,637,232
1887	2,270,082	6,438,128	1,225,813	38,115,135	193,488	10,032,254
1888	2,210,710	6,983,609	1,323,867	43,073,094	208,967	11,233,342
1889	2,321,246	8,073,292	1,350,344	44,527,176	213,146	11,313,579
1890	2,321,246	6,509,126	1,512,385	49,613,323	215,277	11,092,065
1891	2,321,246	7,311,024	1,200,000	38,092,747	230,230	12,072,852
1892	2,444,458	9,040,608	1,246,205	36,151,400	211,751	11,875,597
1893	2,553,450	10,973,142	1,183,865	32,203,376	253,830	11,351,535
1894	2,734,341	10,111,502	1,195,734	25,108,043	261,454	9,246,418
1895	3,065,119	10,800,078	1,183,777	24,528,683	364,069	9,125,296
1896	2,944,065	7,301,281	1,160,101	20,571,902	261,428	7,700,250

UTAH.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	35,070	\$987,922	108,000	\$2,371,080	513,000	\$1,179,900
1883	38,473	1,351,172	132,180	3,157,780	584,300	1,397,880
1884	40,012	1,360,408	145,398	3,580,797	620,730	1,315,948
1885	42,013	1,296,521	162,846	3,888,586	651,767	1,356,586
1886	44,534	1,336,020	219,842	4,498,871	658,285	1,343,682
1887	49,878	1,259,420	435,000	7,232,733	1,335,000	2,594,172
1888	51,873	1,353,885	421,950	6,501,162	1,468,500	2,793,674
1889	52,910	1,169,311	426,170	5,990,615	2,055,900	4,231,617
1890	52,910	1,100,528	383,553	5,258,518	2,055,900	5,070,281
1891	54,497	1,210,378	402,731	5,679,512	2,055,900	4,650,486
1892	55,042	1,321,008	390,649	5,305,016	2,117,577	5,098,023
1893	56,143	1,010,574	351,584	4,075,882	1,905,819	3,098,480
1894	56,704	553,998	358,616	4,134,866	2,039,226	2,908,895
1895	57,271	870,519	360,374	4,253,114	1,998,441	3,157,537
1896	56,698	1,017,729	368,293	4,933,162	1,998,441	3,098,630

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	22,500	\$279,450	44,100	\$2,140,173	3,060	\$215,026
1883	24,525	224,404	48,510	2,322,174	3,152	197,725
1884	26,242	243,526	50,936	2,269,706	3,247	200,782
1885	27,554	197,357	52,464	2,440,806	3,409	214,554
1886	28,656	237,052	56,136	2,466,490	3,579	215,963
1887	40,118	286,846	120,092	4,906,026	3,688	201,686
1888	50,148	422,939	132,761	4,531,358	4,055	193,300
1889	47,641	326,819	139,999	4,838,522	4,055	178,643
1890	47,641	350,400	90,609	3,315,151	4,055	177,397
1891	48,594	416,274	67,957	2,414,946	2,028	111,309
1892	47,130	417,624	76,791	2,398,948	1,825	57,748
1893	51,850	438,887	69,112	1,516,265	1,789	56,133
1894	54,443	386,200	69,803	1,129,671	1,789	45,731
1895	56,021	393,671	71,897	902,149	1,735	40,865
1896	53,700	293,382	71,178	1,207,941	1,648	40,264

NOTE.—Returns from Utah previous to 1882 were included with Nevada, Colorado, and the Territories.

VERMONT.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.			
	Number.	Value.	Number.	Value.	Number.	Value.
1870	193,900	\$9,210,350	140,600	\$6,017,080	548,000	\$1,435,760
1871	191,900	7,027,378	130,700	4,143,180	580,800	2,474,208
1872	195,700	6,914,081	130,700	5,047,634	604,000	2,434,120
1873	195,700	6,947,350	128,000	4,208,640	543,600	1,951,524
1874	201,500	7,234,800	130,500	4,022,010	516,400	2,029,452
1875	209,500	7,000,150	130,500	3,827,565	490,500	1,834,470
1876	215,700	9,235,300	131,800	3,077,530	475,700	1,350,968
1877	217,800	6,370,650	130,400	2,993,064	461,400	1,301,148
1878	217,800	5,445,000	127,800	2,700,414	460,000	1,668,280
1879	207,100	5,187,855	128,500	2,660,335	498,600	1,735,128
1880	200,887	4,881,554	125,235	2,696,310	508,572	1,688,459
1881	221,374	5,667,174	187,933	4,679,522	444,289	1,466,068
1882	225,801	6,848,544	187,933	6,181,116	448,712	2,046,127
1883	270,317	7,139,827	187,933	6,184,875	448,712	2,032,665
1884	225,711	5,888,496	180,416	5,120,306	385,892	1,142,240
1885	218,949	6,298,252	176,806	4,607,683	378,174	1,062,081
1886	221,129	6,019,131	178,576	4,865,493	378,174	1,061,459
1887	225,552	6,473,342	180,362	5,059,688	383,301	1,120,279
1888	232,319	6,086,758	185,773	4,771,583	365,770	1,111,941
1889	234,642	5,572,748	169,053	3,834,563	362,112	1,070,114
1890	234,642	5,514,087	167,362	3,582,884	351,249	1,068,038
1891	239,336	5,823,021	165,088	3,687,798	358,274	1,170,725
1892	238,856	5,644,167	100,717	3,346,122	329,612	1,199,362
1893	246,022	6,212,066	152,681	3,003,164	290,170	604,719
1894	253,403	6,925,304	146,574	3,030,814	226,938	363,464
1895	258,471	6,415,250	143,643	3,044,676	181,550	349,593
1896	263,640	6,477,635	137,897	2,646,357	157,948	318,423

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	66,700	\$1,133,960	71,000	\$6,921,790		
1871	61,300	583,576	71,000	6,750,680		
1872	56,200	536,262	71,000	6,623,590		
1873	53,500	513,065	71,000	6,049,300		
1874	52,400	635,000	72,400	6,619,532		
1875	51,800	631,442	74,500	6,201,380		
1876	53,300	549,523	75,200	5,329,424		
1877	54,300	434,400	75,900	4,919,538		
1878	50,500	290,880	77,400	4,486,104		
1879	49,400	375,804	77,400	4,918,770		
1880	49,400	406,562	77,400	4,748,480		
1881	75,620	843,163	75,967	4,717,551	286	\$25,025
1882	74,864	673,683	76,119	5,502,043	295	26,777
1883	74,864	646,825	76,580	6,024,317	300	27,000
1884	74,115	619,601	77,049	6,353,062		
1885	74,115	511,112	79,362	6,627,271		
1886	74,850	589,688	82,370	6,780,071		
1887	70,353	688,285	84,941	7,145,111		
1888	77,117	714,486	86,962	7,283,194		
1889	77,888	667,682	84,353	6,713,276		
1890	75,551	554,210	84,353	6,606,246		
1891	74,735	537,412	90,238	6,894,201		
1892	74,047	751,205	92,966	6,352,090		
1893	76,268	695,032	94,825	5,171,851		
1894	77,031	730,007	93,877	4,304,696		
1895	78,572	582,990	91,909	4,070,381		
1896	76,215	556,791	88,319	3,977,151		

VIRGINIA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870.....	229,500	\$8,676,155	397,800	\$8,480,052	394,800	\$935,676
1871.....	234,000	5,833,620	406,700	6,932,087	386,900	1,044,630
1872.....	234,000	5,643,460	405,700	6,844,166	386,900	1,176,176
1873.....	234,000	5,148,000	406,700	6,978,040	387,500	1,085,730
1874.....	229,300	5,280,142	397,500	6,169,300	387,500	1,085,150
1875.....	227,000	5,168,790	397,500	6,701,850	356,400	1,044,252
1876.....	229,200	5,014,896	393,500	6,736,720	387,000	1,031,270
1877.....	240,600	5,122,374	431,100	6,580,683	422,000	1,098,790
1878.....	238,200	4,261,368	431,100	6,350,101	417,800	923,338
1879.....	240,000	4,537,716	431,100	6,686,361	426,100	950,373
1880.....	243,006	4,677,865	431,100	7,324,389	447,405	1,199,045
1881.....	240,631	4,714,368	429,829	7,625,106	502,262	1,245,610
1882.....	245,353	5,424,755	441,232	8,855,526	502,262	1,371,175
1883.....	245,353	5,606,316	436,820	8,976,651	487,194	1,256,961
1884.....	247,807	6,024,188	432,452	8,986,353	477,450	1,250,919
1885.....	247,807	5,404,671	423,803	7,804,752	463,127	1,056,922
1886.....	255,241	5,870,543	428,041	7,958,353	449,233	1,034,134
1887.....	257,793	5,542,550	423,761	7,390,725	444,741	1,078,035
1888.....	250,082	5,242,271	419,523	7,245,100	435,846	1,085,257
1889.....	272,096	5,244,854	419,523	6,569,393	444,563	1,151,063
1890.....	277,477	6,018,476	419,523	6,976,457	444,563	1,293,720
1891.....	280,252	6,235,607	419,523	7,233,456	449,000	1,370,016
1892.....	279,411	5,588,220	405,937	6,551,608	496,400	1,497,194
1893.....	276,617	5,001,235	411,006	6,206,936	488,432	1,247,651
1894.....	273,851	5,014,212	394,566	5,731,856	449,367	974,027
1895.....	265,635	4,818,619	336,670	6,138,896	426,889	894,769
1896.....	200,322	4,657,161	371,208	5,723,360	392,738	849,774

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870.....	757,500	\$4,242,000	178,500	\$15,160,005	29,400	\$3,202,542
1871.....	810,500	2,901,590	183,800	14,369,484	29,400	3,246,349
1872.....	818,600	3,004,262	185,600	15,139,392	29,400	3,213,429
1873.....	753,100	2,643,381	189,300	14,371,656	29,600	3,073,368
1874.....	692,700	2,717,070	191,100	13,801,242	29,800	2,896,856
1875.....	598,800	2,624,610	194,900	13,551,397	29,800	2,550,880
1876.....	607,400	2,781,862	198,700	12,824,098	29,800	2,366,716
1877.....	750,300	2,006,432	204,600	12,807,960	31,200	2,355,912
1878.....	713,800	1,969,536	208,700	10,908,490	30,600	1,942,488
1879.....	692,100	2,422,350	212,900	12,075,698	30,300	2,042,523
1880.....	950,800	3,738,644	227,803	13,595,283	31,612	2,258,045
1881.....	889,499	4,180,645	221,026	13,314,606	33,934	2,456,482
1882.....	773,894	4,147,911	221,468	15,779,585	34,002	3,345,797
1883.....	820,286	3,478,055	225,897	16,562,768	34,002	3,006,117
1884.....	795,687	3,421,454	229,285	16,768,497	34,342	3,057,125
1885.....	875,256	3,306,063	253,871	16,267,669	34,342	2,257,296
1886.....	787,730	3,237,670	238,548	10,725,673	35,372	3,059,096
1887.....	811,362	3,521,313	243,319	17,249,636	35,726	3,121,139
1888.....	827,589	3,434,495	246,909	17,496,893	36,063	3,193,125
1889.....	1,049,659	3,953,701	259,317	18,172,031	36,063	3,116,584
1890.....	969,273	3,426,381	243,758	17,781,396	36,444	3,214,853
1891.....	978,968	3,596,722	246,196	18,407,152	37,173	3,319,391
1892.....	929,228	3,772,018	248,658	17,135,626	37,545	3,109,007
1893.....	920,228	4,000,044	251,145	14,074,839	39,422	2,756,406
1894.....	957,677	4,041,567	253,636	11,327,410	38,634	2,244,254
1895.....	985,514	3,768,514	246,040	9,806,229	38,248	2,134,133
1896.....	966,005	3,361,164	243,586	8,870,390	37,483	1,620,880

WASHINGTON.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	31,200	\$978,432	117,300	\$2,814,027	380,000	\$855,500
1883	45,632	1,685,568	230,376	5,722,540	456,300	1,080,557
1884	51,108	1,712,118	253,414	6,979,022	533,871	1,270,023
1885	58,730	1,815,360	286,358	7,445,308	544,548	1,223,491
1886	62,403	2,050,290	300,676	7,047,849	555,430	1,110,878
1887	65,523	2,181,916	300,676	7,080,177	549,885	1,088,976
1888	72,731	2,509,220	315,710	7,913,901	560,883	1,034,829
1889	83,641	3,001,875	309,381	8,684,635	673,060	1,545,346
1890	92,005	3,404,185	443,257	9,293,106	673,060	1,763,687
1891	96,005	3,381,175	447,690	9,345,532	686,521	1,858,824
1892	101,435	3,347,355	429,782	9,493,673	823,825	2,328,130
1893	108,535	3,117,125	408,203	8,487,108	832,063	1,989,706
1894	113,982	2,335,375	428,708	6,887,672	748,857	1,304,300
1895	117,381	2,501,772	381,550	5,803,002	750,348	1,318,402
1896	120,902	2,830,361	351,926	5,301,224	741,210	1,375,851

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	50,300	\$272,020	35,640	\$3,410,732	840	\$80,254
1883	51,827	423,813	68,094	4,738,508	874	75,050
1884	63,590	480,712	73,824	4,783,657	961	80,705
1885	66,779	321,280	81,945	5,520,821	1,008	85,765
1886	90,132	384,049	94,297	6,018,458	1,251	102,247
1887	91,054	455,997	96,122	5,935,037	1,243	90,520
1888	95,907	532,058	98,044	6,357,223	1,243	104,307
1889	143,411	785,802	118,653	7,537,473	1,263	108,080
1890	147,713	888,052	148,291	10,384,819	1,306	116,893
1891	152,144	1,087,476	170,555	10,018,740	1,371	96,108
1892	158,230	1,208,878	196,115	11,680,903	1,378	93,017
1893	162,977	897,678	196,076	8,040,067	1,392	96,295
1894	211,870	1,180,268	200,057	6,457,895	1,392	50,616
1895	230,413	1,041,160	192,055	5,574,956	1,420	56,064
1896	210,683	700,310	176,691	3,616,227	1,420	55,677

NOTE.—Returns from Washington previous to 1882 were included with Nevada, Colorado, and the Territories.

WEST VIRGINIA.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.		
1870	117,300	\$4,073,329	233,200	\$6,951,692	562,800	\$1,187,008
1871	118,400	4,007,840	233,200	5,778,682	540,000	1,290,680
1872	120,700	3,596,860	235,500	5,607,430	561,600	1,499,472
1873	124,900	3,418,350	242,500	5,636,700	555,900	1,400,860
1874	124,900	3,387,175	237,600	5,534,700	539,200	1,331,894
1875	125,600	3,234,135	235,200	5,087,376	544,500	1,368,435
1876	125,600	3,329,615	235,200	4,920,384	544,500	1,233,390
1877	128,700	3,404,429	244,600	5,258,900	549,900	1,193,238
1878	130,600	3,004,140	242,400	4,787,400	571,900	1,241,038
1879	131,800	2,763,846	232,700	4,385,452	600,500	1,235,076
1880	133,118	2,973,556	237,354	4,785,067	680,550	1,035,126
1881	157,427	3,927,804	296,473	6,676,841	681,517	1,090,126
1882	158,214	4,573,067	289,519	6,705,280	684,925	1,328,739
1883	161,378	5,012,401	289,519	7,400,106	671,298	1,751,690
1884	164,608	4,773,574	289,519	6,766,059	637,665	1,421,900
1885	166,252	4,226,126	289,519	5,226,327	624,912	1,174,200
1886	167,915	4,449,748	286,684	5,684,480	593,688	1,297,042
1887	171,273	4,122,541	280,862	5,196,913	474,933	1,073,824
1888	176,411	4,128,017	283,701	5,127,061	484,432	1,103,586
1889	179,939	3,872,287	286,538	5,156,882	508,654	1,251,796
1890	181,738	4,089,105	286,538	5,248,402	518,827	1,458,423
1891	183,555	4,168,534	282,268	5,455,723	529,204	1,646,354
1892	184,106	3,728,147	283,501	5,000,807	841,434	2,518,238
1893	182,265	3,490,375	354,376	5,387,721	765,705	1,619,772
1894	180,442	3,690,597	329,570	4,982,221	635,535	1,137,734
1895	175,029	3,595,096	296,613	4,553,985	514,785	894,231
1896	171,628	3,631,248	266,962	4,461,825	458,157	1,000,065

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	319,000	\$1,531,200	97,800	\$8,002,974	2,300	\$311,784
1871	331,700	1,210,705	99,700	7,210,304	2,300	197,592
1872	351,600	1,258,728	103,600	6,930,840	2,300	193,821
1873	334,000	1,229,120	104,600	6,850,254	2,390	191,524
1874	310,600	1,298,308	106,600	6,731,790	2,400	174,864
1875	248,400	1,336,392	111,900	6,651,336	2,400	163,392
1876	270,700	1,283,118	114,100	6,314,294	2,400	142,464
1877	281,500	1,168,225	117,500	6,147,000	2,400	137,184
1878	284,300	793,197	122,200	5,805,722	2,400	119,364
1879	287,100	1,033,560	124,600	5,963,356	2,500	128,000
1880	504,300	1,830,500	127,062	6,692,665	2,425	126,649
1881	450,552	2,159,894	124,882	6,506,352	6,164	361,649
1882	404,406	2,394,064	125,257	8,175,524	6,349	473,715
1883	424,626	2,084,914	126,510	8,887,327	6,349	507,539
1884	416,133	1,739,436	129,040	8,907,631	6,349	499,444
1885	416,133	1,522,133	131,621	8,008,848	6,412	494,163
1886	432,778	1,780,448	135,570	8,910,107	6,540	495,380
1887	432,778	1,619,744	138,281	9,212,076	6,475	477,223
1888	454,417	1,908,888	139,664	9,241,237	6,799	506,469
1889	486,226	1,993,139	146,647	9,638,581	6,867	514,411
1890	476,501	1,723,599	146,647	9,905,641	6,867	517,513
1891	481,266	1,831,098	155,446	10,216,770	7,210	527,639
1892	442,765	2,364,031	158,365	9,205,705	7,239	491,275
1893	407,344	1,975,098	163,312	7,586,792	7,601	431,036
1894	378,830	1,480,317	169,844	6,581,579	7,601	373,094
1895	375,042	1,509,470	161,352	5,311,241	7,601	325,965
1896	371,292	1,577,100	156,511	5,209,206	7,601	290,066

WISCONSIN.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number	Value.
	Number.	Value.	Number.	Value.		
1870	386,200	\$13,617,412	388,500	\$10,435,110	1,056,000	\$2,576,640
1871	405,500	11,877,085	419,500	11,141,920	1,008,200	2,921,212
1872	425,700	11,919,600	440,400	10,406,662	1,153,100	3,253,273
1873	442,700	11,634,156	444,800	9,767,808	1,187,600	3,135,264
1874	464,800	12,256,776	435,900	9,271,583	1,211,300	2,894,442
1875	474,000	12,679,500	448,900	9,153,071	1,162,800	3,186,072
1876	474,000	12,731,640	466,800	9,905,496	1,151,100	2,820,195
1877	450,300	11,901,429	513,400	10,843,008	1,323,700	3,229,828
1878	477,300	9,966,024	533,500	8,909,450	1,313,000	2,586,610
1879	458,200	9,981,178	522,700	9,319,741	1,316,100	3,145,479
1880	438,872	9,109,749	517,473	10,603,022	1,329,261	3,349,738
1881	487,941	12,984,110	637,752	14,904,284	1,350,173	3,375,437
1882	517,217	17,171,604	689,640	17,668,577	1,363,677	3,518,287
1883	532,734	17,313,855	682,743	18,208,750	1,336,403	3,180,639
1884	548,716	16,702,915	710,053	17,659,018	1,282,947	2,809,654
1885	565,177	16,131,018	710,053	16,489,086	1,218,500	2,305,960
1886	548,222	14,080,805	681,651	16,008,369	1,072,544	2,230,462
1887	548,222	13,094,130	640,762	13,438,103	911,632	1,982,261
1888	568,568	14,691,850	659,975	12,818,582	793,146	1,909,895
1889	674,588	16,385,743	805,170	13,772,432	809,100	2,202,446
1890	694,226	14,938,750	845,429	13,701,979	889,510	2,507,114
1891	701,774	14,414,438	686,975	13,749,322	907,708	2,638,630
1892	715,806	16,596,184	820,230	14,594,233	1,198,175	3,638,903
1893	787,090	19,185,073	779,224	13,651,683	1,066,703	2,394,225
1894	811,012	17,617,621	748,055	11,752,026	895,756	1,474,414
1895	802,902	17,832,453	673,250	11,693,824	779,350	1,498,176
1896	786,844	18,808,519	632,855	10,574,004	708,722	1,679,101

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870	651,900	\$5,109,587	310,200	\$24,775,674	4,800	\$511,440
1871	651,900	2,874,879	328,800	25,051,272	5,000	449,950
1872	658,400	3,074,728	335,300	26,039,308	5,000	504,300
1873	618,800	2,728,008	335,300	24,242,190	4,800	432,708
1874	587,800	3,038,926	348,700	26,870,822	5,100	461,244
1875	540,700	4,068,506	352,100	23,608,305	5,200	443,352
1876	462,300	3,773,033	359,100	23,542,586	8,500	728,535
1877	635,300	3,602,151	362,600	23,525,488	8,400	698,040
1878	635,300	2,071,078	384,400	23,283,108	8,700	693,723
1879	571,800	2,899,026	392,100	23,620,104	8,900	648,721
1880	571,800	3,019,104	399,042	25,448,309	8,989	606,106
1881	1,117,537	8,381,527	393,001	23,050,563	7,207	560,705
1882	1,132,238	11,343,443	377,521	28,838,829	7,423	705,482
1883	1,046,014	6,359,765	381,296	31,239,581	7,423	714,315
1884	1,066,934	6,316,241	388,922	30,797,554	8,091	747,366
1885	1,056,265	5,468,282	396,700	30,957,952	8,010	732,965
1886	1,003,452	5,314,284	406,601	32,983,234	8,010	754,877
1887	1,123,866	6,766,798	412,687	32,141,507	7,930	716,424
1888	989,012	7,340,375	425,068	34,395,550	7,851	711,693
1889	1,087,912	6,141,208	437,820	33,673,249	7,066	510,681
1890	1,109,660	5,831,263	433,442	31,757,833	6,359	648,797
1891	1,109,660	5,925,584	463,793	34,441,649	5,342	438,819
1892	921,018	7,653,657	480,479	35,219,190	5,289	421,324
1893	930,228	7,317,171	475,674	27,193,118	5,025	318,579
1894	911,623	5,807,950	466,161	20,345,306	5,025	258,106
1895	902,507	5,656,011	442,853	18,633,229	4,925	216,880
1896	902,507	4,850,067	420,710	17,239,021	4,826	182,024

WYOMING.

Table showing the estimated number and value of farm animals for the years 1870 to 1896, inclusive.

Year.	Cattle.				Sheep.	
	Milch cows.		Other cattle.		Number.	Value.
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	3,916	\$97,900	780,000	\$18,298,800	520,000	\$1,591,500
1883	4,533	149,589	897,000	23,456,550	598,000	1,303,640
1884	5,666	215,308	914,940	23,065,637	609,960	1,268,717
1885	6,233	236,854	1,280,916	32,022,900	518,466	1,072,188
1886	6,358	184,382	1,255,298	28,815,385	534,020	1,047,480
1887	6,994	244,790	1,230,192	23,504,083	523,340	1,089,655
1888	8,323	305,454	1,107,173	21,684,642	565,207	1,187,217
1889	10,404	335,529	1,217,890	18,240,947	1,017,373	2,249,921
1890	13,005	429,165	1,090,101	14,766,681	1,119,110	2,521,914
1891	13,395	428,640	1,107,062	15,910,696	1,141,462	2,808,070
1892	17,815	534,450	774,943	11,934,118	1,198,567	2,300,255
1893	17,815	438,249	852,437	11,923,042	1,198,567	2,603,284
1894	18,706	397,503	767,193	10,562,182	1,222,538	2,004,107
1895	18,532	449,134	751,849	12,389,717	1,393,693	2,513,914
1896	18,515	467,504	781,923	13,347,431	1,672,432	3,005,862

Year.	Hogs.		Horses.		Mules.	
	Number.	Value.	Number.	Value.	Number.	Value.
1870						
1871						
1872						
1873						
1874						
1875						
1876						
1877						
1878						
1879						
1880						
1881						
1882	735	\$7,784	14,850	\$893,970	780	\$90,840
1883			16,335	816,750		
1884			18,785	862,644		
1885	2,500	16,250	32,000	3,825,360	3,100	248,000
1886	2,750	17,506	82,500	3,678,075	2,850	198,867
1887	2,613	17,358	99,000	4,336,279	2,936	227,861
1888	2,744	25,136	108,900	4,645,130	3,200	257,580
1889	5,200	31,424	141,570	5,556,497	2,880	209,884
1890	10,400	60,211	142,986	5,582,536	2,504	166,763
1891	10,620	66,362	100,060	3,422,190	1,382	98,040
1892	15,834	137,993	97,067	2,960,175	1,368	89,942
1893	15,834	106,530	82,524	1,988,009	1,505	85,870
1894	15,894	102,417	82,524	1,589,457	1,506	59,618
1895	15,894	113,963	81,699	1,399,106	1,445	48,623
1896	17,734	80,122	77,614	1,018,693	1,474	53,019

NOTE.—Returns from Wyoming previous to 1882 were included with Nevada, Colorado, and the Territories.

IMPORTS AND EXPORTS OF ANIMALS AND ANIMAL PRODUCTS.

The ultimate end of all surplus farm products is to find a market. Generally speaking, the supply of agricultural products in this country always exceeds the demand, hence the foreign market is ever one of importance. A careful consideration of the tables which follow will show that this country imports many animal products which might be produced with ease and profit on our own farms.

With these tables, as with all foreign commerce, one must take into consideration tariff rates, reciprocity treaties, exceptional demands on account of drouths, etc.—all those matters which to some extent have a bearing upon the law of supply and demand.

EGGS.

Table showing the quantity and value of imports and exports of eggs from 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Year.	Imports.		Exports.		Imports over exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Dozens.</i>	<i>Dollars.</i>	<i>Dozens.</i>	<i>Dollars.</i>	<i>Dozens.</i>	<i>Dollars.</i>
1892.....	3,373,066	379,516	193,742	34,851	3,179,344	344,665
1893.....	2,457,576	284,178	151,311	43,098	2,306,265	241,080
1894.....	1,641,901	190,487	174,523	28,258	1,467,376	162,179
1895.....	1,954,962	219,459	181,754	29,346	1,773,208	190,113
1896.....	677,359	56,004	405,192	63,460	272,167	7,456
Total.....	10,104,884	1,129,594	1,106,522	199,013	8,998,362	930,581

a Excess over imports.

BUTTER.

Table showing the quantity and value of imports and exports of butter from 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Year.	Imports.		Exports.		Exports over imports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
1892.....	64,725	10,711	11,397,937	2,000,609	11,397,937	1,989,898
1893.....	170,387	27,942	6,945,374	1,348,121	6,774,987	1,320,179
1894.....	52,868	9,921	10,089,224	1,730,453	10,036,356	1,720,532
1895.....	65,096	10,857	14,196,014	2,194,481	14,132,919	2,183,624
1896.....	37,623	6,059	27,231,910	3,918,336	27,244,293	3,912,277
Total.....	390,698	65,490	69,912,465	11,192,000	69,596,472	11,126,510

NOTE.—The exports include exports of foreign butter, a small item.

CHEESE.

Table showing the quantity and value of imports and exports of cheese from 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Year.	Imports.		Exports.		Exports over imports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.	Dollars.	Pounds.	Dollars.	Pounds.	Dollars.
1892.....	9,210,123	1,297,609	83,302,041	7,851,557	79,091,918	6,553,948
1893.....	10,029,549	1,411,357	69,479,432	6,691,656	59,449,883	5,280,299
1894.....	9,150,259	1,291,067	69,381,928	6,694,249	60,231,669	5,403,182
1895.....	10,440,863	1,471,091	40,894,295	3,414,389	30,453,432	1,943,298
1896.....	11,349,856	1,547,741	44,627,889	3,860,146	33,278,033	2,312,405
Total.....	50,180,650	7,018,855	307,685,585	28,511,997	292,505,935	21,493,142

NOTE.—The exports include exports of foreign cheese, amounting to 499,153 pounds, valued at \$69,237.

WOOL, WOOL MANUFACTURES, ETC.

Table showing the value of imports and exports of wool and wool manufactures (including hair of the goat, camel, etc.) for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Year.	Imports.	Exports.	Imports over exports.
1892.....	\$58,708,064	\$1,018,496	\$57,689,568
1893.....	44,192,055	1,830,543	42,361,512
1894.....	30,605,194	1,549,873	29,055,321
1895.....	94,089,490	2,310,881	91,778,609
1896.....	59,580,774	3,094,680	56,486,114
Total.....	257,123,597	9,794,453	277,829,144

LEATHER AND LEATHER MANUFACTURES.

Table showing the value of imports and exports of leather and manufactures of leather from 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Year.	Imports.	Exports.	Excess of imports (+) or exports (—).
1892.....	\$14,441,349	\$11,424,150	+\$3,017,199
1893.....	13,668,046	13,675,724	— 7,678
1894.....	10,660,301	13,161,247	— 2,500,946
1895.....	15,790,701	16,279,190	— 488,489
1896.....	11,206,284	18,877,457	— 7,669,173
Total.....	65,766,681	73,417,768	— 7,651,087

HORSES, CATTLE, SHEEP, ETC.

Table showing the number and value of imports of horses, cattle, sheep, etc., for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Year.	Horses.		Cattle.		Sheep.		All others, including fowls.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
1892.....	14, 184	\$2, 461, 262	3, 406	\$32, 244	442, 752	\$1, 604, 863	-----	\$317, 381
1893.....	12, 542	2, 123, 657	1, 717	23, 056	253, 181	879, 786	-----	480, 308
1894.....	7, 796	923, 739	47, 211	257, 970	206, 836	723, 583	-----	290, 322
1895.....	14, 383	841, 815	236, 888	1, 447, 512	323, 553	840, 679	-----	235, 617
1896.....	8, 232	501, 819	141, 673	988, 227	382, 443	1, 013, 481	-----	223, 477
Total..	57, 059	6, 861, 792	430, 895	2, 779, 009	1, 700, 765	5, 082, 392	-----	1, 516, 969

CATTLE.

Table showing the number and value of cattle exported, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Number.	Value.	Number.	Value.	Number.	Value.
United Kingdom.....	-----	-----	244, 110	\$22, 712, 978	385, 794	\$36, 097, 905
Germany.....	-----	-----	-----	-----	9, 505	907, 712
France.....	-----	-----	351	30, 060	14, 540	1, 197, 540
Other Europe.....	-----	-----	635	51, 250	5, 860	514, 450
British North America.....	-----	-----	388	8, 657	715	16, 104
Mexico.....	-----	-----	668	38, 367	2, 150	35, 331
Central American States and British Honduras.....	-----	-----	88	6, 900	47	4, 400
West Indies and Bermuda.....	-----	-----	1, 749	107, 923	1, 861	150, 234
South America.....	-----	-----	279	27, 241	156	13, 812
Asia and Oceania.....	-----	-----	18	1, 016	59	3, 375
Other countries.....	-----	-----	3	170	156	12, 581
Total.....	200, 945	\$35, 396, 064	248, 284	22, 984, 562	420, 835	38, 963, 554

Country to which exported.	1895.		1896.	
	Number.	Value.	Number.	Value.
United Kingdom.....	284, 258	\$36, 627, 461	385, 350	\$35, 932, 727
Germany.....	-----	-----	-----	-----
France.....	831	62, 400	-----	-----
Other Europe.....	660	66, 100	3, 058	258, 150
British North America.....	353	6, 049	3, 328	211, 430
Mexico.....	887	34, 593	861	28, 441
Central American States and British Honduras.....	208	12, 685	204	12, 196
West Indies and Bermuda.....	1, 909	173, 228	1, 817	183, 945
South America.....	166	8, 735	45	3, 323
Asia and Oceania.....	61	3, 850	107	5, 500
Other countries.....	17	2, 600	2	700
Total.....	289, 350	26, 997, 701	394, 772	36, 576, 412

BUREAU OF ANIMAL INDUSTRY.

HORSES, CATTLE, SHEEP, ETC.

Table showing the number and value of exports of horses, cattle, sheep, etc., for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Year.	Horses.		Mules.		Cattle.	
	Number.	Value.	Number.	Value.	Number.	Value.
1892.....	3,025	\$622,512	1,896	\$230,808	290,961	\$35,364,724
1893.....	8,578	1,022,424	1,796	216,762	248,284	22,984,562
1894.....	8,174	1,365,663	1,932	201,004	420,835	38,963,554
1895.....	19,970	3,065,007	4,834	321,158	289,350	26,997,701
1896.....	26,713	3,640,732	6,534	475,106	394,772	36,576,412
Total.....	61,460	9,716,838	16,992	1,444,636	1,644,202	180,918,963

Year.	Sheep.		Hogs.		All others, including fowls.	
	Number.	Value.	Number.	Value.	Number.	Value.
1892.....	41,850	\$151,059	42,170	\$632,136	.....	\$30,794
1893.....	38,134	145,596	2,029	46,032	.....	58,308
1894.....	274,133	1,711,355	3,381	31,479	.....	49,471
1895.....	500,260	3,311,797	11,352	116,672	.....	56,897
1896.....	823,598	1,948,933	33,785	367,917	.....	52,334
Total.....	1,177,975	7,268,730	92,717	1,094,236	.....	247,799

HOGS.

Table showing the number and value of hogs exported, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Number.	Value.	Number.	Value.	Number.	Value.
United Kingdom.....			62	\$700	.....	.....
British North America.....			258	2,047	591	\$3,377
Mexico.....			977	34,670	1,305	16,555
West Indies and Bermuda.....			89	1,476	66	1,081
South America.....			91	2,305	149	2,189
Asia and Oceanica.....			510	3,883	1,213	7,278
Other countries.....			42	951	57	999
Total.....	42,170	\$532,136	2,029	46,032	3,381	31,479

Country to which exported.	1895.		1896.	
	Number.	Value.	Number.	Value.
United Kingdom.....	310	\$3,940	315	\$2,989
British North America.....	915	3,874	2,937	10,051
Mexico.....	8,105	97,765	28,848	345,056
West Indies and Bermuda.....	23	308	55	1,322
South America.....	22	425	21	631
Asia and Oceanica.....	1,873	8,596	1,499	6,582
Other countries.....	104	1,674	110	1,236
Total.....	11,352	116,672	33,785	367,917

SHEEP.

Table showing the number and value of sheep exported, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Number.	Value.	Number.	Value.	Number.	Value.
United Kingdom					209,566	\$1,495,833
Other Europe						
British North America			32,557	\$106,877	50,467	139,504
Mexico			1,261	4,417	5,538	8,648
West Indies and Bermuda			2,942	22,232	3,078	23,674
South America			1,828	11,332	1,591	13,091
Other countries			46	728	3,993	30,606
Total	41,839	\$50,729	38,134	145,586	274,133	1,711,563.

Country to which exported.	1895.		1896.	
	Number.	Value.	Number.	Value.
United Kingdom	414,914	\$2,929,047	241,276	\$1,624,842
Other Europe	20,841	168,498	14,106	119,420
British North America	56,373	150,472	55,848	123,049
Mexico	1,768	8,047	5,373	14,121
West Indies and Bermuda	4,453	33,239	5,359	37,987
South America	1,682	16,465	1,492	20,427
Other countries	140	5,180	122	8,995
Total	500,171	3,310,936	323,576	1,948,841

NOTE.—This table does not include the export of foreign sheep, which was a small item in each of the years 1895 and 1896.

FRESH BEEF.

Table showing quantity and value of fresh beef exported, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	231,597,594	19,071,366	172,509,464	15,407,001	203,492,515	17,342,383
Other Europe						
British North America	748,854	53,046	117,542	8,994	335,281	20,908
West Indies and Bermuda	631,221	51,763	270,015	24,169	167,243	14,662
Other countries	5,700	452	467	43	319,921	28,785
Total	232,983,369	19,176,627	172,897,488	15,440,207	204,314,960	17,404,763

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	183,998,620	16,493,352	232,648,895	22,477,747
Other Europe	113,250	7,723		
British North America	94,658	6,140	51,065	3,592
West Indies and Bermuda	150,770	14,731	225,473	16,912
Other countries	816	72		
Total	184,358,114	16,522,018	282,925,463	22,498,251

CANNED BEEF.

Table showing the quantity and value of canned beef exported, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.	Dollars.	Pounds.	Dollars.	Pounds.	Dollars.
United Kingdom	62,500,968	5,826,248	48,447,966	4,593,526	36,131,456	3,129,779
Germany	7,790,460	632,860	6,527,934	559,935	5,662,463	496,680
France	9,576,751	790,740	1,232,806	104,975	7,019,579	578,783
Other Europe	4,405,458	401,487	3,214,973	290,923	3,465,243	304,205
British North America	1,636,712	136,452	1,173,378	94,072	1,410,428	116,639
Mexico	96,803	10,070	79,702	8,780	80,173	8,074
Central American States and British Honduras	102,457	9,174	98,934	8,873	142,935	12,843
Cuba	840,301	71,496	197,934	17,667	60,310	4,811
Porto Rico	3,043	254	6,212	546	4,792	376
Santo Domingo	2,012	178	1,492	167	8,572	671
Other West Indies and Bermuda	495,203	40,961	523,653	45,060	660,426	54,633
South America	320,441	26,537	649,772	74,439	905,310	72,862
China					56,500	7,614
British Australasia	945,171	73,669	360,216	32,780	249,263	27,023
British East Indies					3,024	410
Other Asia and Oceania	462,025	66,406	367,741	58,817	2,355,932	224,668
Africa	900,296	75,579	783,644	66,737	1,164,606	94,466
Other countries	34,654	5,088	19,150	2,818	14,720	1,670
Total	90,112,775	8,167,199	63,711,539	5,940,115	59,524,794	5,223,795

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	Pounds.	Dollars.	Pounds.	Dollars.
United Kingdom	41,451,626	3,740,148	38,961,048	3,374,707
Germany	8,654,048	708,341	3,728,029	407,596
France	1,921,911	160,850	4,559,263	377,322
Other Europe	3,261,949	287,173	3,302,638	294,424
British North America	1,104,257	96,126	1,622,658	123,786
Mexico	131,248	14,242	124,135	14,547
Central American States and British Honduras	241,327	25,104	226,530	27,543
Cuba	21,110	1,644	28,046	2,115
Porto Rico	768	62	1,536	115
Santo Domingo	200	14	1,037	86
Other West Indies and Bermuda	525,993	47,289	360,090	33,100
South America	1,005,538	81,183	483,246	36,453
China	119,600	15,964	84,784	12,143
British Australasia	174,151	13,440	13,200	1,777
British East Indies	4,890	602	2,131	182
Other Asia and Oceania	867,459	125,623	1,207,430	129,282
Africa	1,990,817	156,721	6,421,796	492,260
Other countries	16,930	2,334	2,130	249
Total	61,463,112	5,476,040	61,168,927	5,335,263

a Exports to China for 1892 and 1893 are included in "Other Asia and Oceania."

b Includes British India for 1895 and 1896.

CURED BEEF.

Table showing the quantity and value of exports of salted, pickled, and other cured beef, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	32,280,674	1,784,108	24,153,837	1,456,372	28,307,788	1,636,274
Germany	7,302,976	302,696	5,500,579	320,940	8,273,352	505,897
France	462,300	24,815	439,700	24,409	743,800	42,949
Other Europe	7,144,088	402,738	4,536,058	261,154	5,137,285	282,362
British North America	9,622,632	469,745	6,623,679	306,373	7,302,288	347,382
Mexico			2,986	353	21,113	1,738
Central American States and British Honduras	685,807	31,515	672,910	36,468	541,927	29,222
Cuba	108,365	5,576	70,364	4,084	54,811	2,975
Porto Rico	100,180	4,745	85,580	4,363	35,500	1,928
Santo Domingo	163,940	8,061	136,460	7,996	616,371	35,123
Other West Indies and Bermuda	8,149,286	450,470	8,321,874	504,048	8,851,808	514,355
Brazil	39,247	2,144	55,400	3,528	68,100	3,553
Colombia	332,945	10,813	244,588	12,800	217,726	11,487
Other South America	3,367,556	186,069	2,489,288	157,047	4,010,928	241,793
Asia and Oceania	465,800	23,502	729,400	36,245	751,780	44,381
Africa	95,818	4,671	119,776	5,978	358,530	18,604
Other countries	49,306	2,628	-31,750	1,694	67,007	3,911
Total	70,360,653	3,803,781	54,307,218	3,135,825	65,360,094	3,722,914

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	30,396,334	1,823,980	50,167,896	2,907,280
Germany	8,086,966	467,978	6,308,750	338,208
France	308,600	19,103	589,966	31,091
Other Europe	7,456,631	432,297	8,342,065	444,861
British North America	6,245,004	302,631	5,780,518	258,109
Mexico	6,962	410	6,712	396
Central American States and British Honduras	563,539	30,147	562,922	29,201
Cuba	10,541	587	38,900	1,735
Porto Rico	45,950	2,300	48,900	2,272
Santo Domingo	54,000	3,086	48,790	2,140
Other West Indies and Bermuda	6,719,348	396,151	7,435,086	369,489
Brazil	55,750	3,396	99,250	4,844
Colombia	210,502	10,345	238,004	10,189
Other South America	3,123,398	181,512	4,305,179	212,298
Asia and Oceania	1,166,863	63,427	1,596,227	80,253
Africa	238,685	12,209	227,151	13,764
Other countries	83,109	4,065	23,300	1,014
Total	65,082,722	3,743,651	85,893,296	4,707,094

BACON.

Table showing the quantity and value of exports of bacon, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	425,050,161	34,244,077	296,943,650	30,541,679	342,006,950	29,599,224
Germany	17,159,362	1,241,675	4,958,640	484,692	13,425,610	1,054,867
France	1,420,720	108,958			4,549,521	365,464
Other Europe	62,431,072	4,780,853	26,381,399	2,506,116	43,950,609	3,556,477
British North America	4,833,886	365,065	8,411,223	722,148	7,358,497	583,631
Mexico			51,494	6,063	60,890	6,337
Central American States and British Honduras	174,133	13,942	120,008	13,240	152,045	13,430
Cuba	7,769,884	526,485	6,042,418	573,090	5,312,029	416,794
Porto Rico	614,108	42,002	124,410	11,144	300,307	23,403
Santo Domingo	144,624	10,001	77,185	8,174	168,232	13,496
Other West Indies and Bermuda	392,439	30,583	223,338	20,087	503,683	41,761
Brazil	3,018,977	268,358	3,802,354	426,342	21,749,733	1,965,755
Colombia			14,662	1,209	12,107	992
Other South America	246,760	18,583	196,167	20,947	220,491	19,064
China			15,026	2,447	14,515	2,049
Other Asia and Oceanica	93,700	12,914	245,561	23,746	72,801	10,171
Africa			28,865	2,429	684	55
Other countries	108,844	9,018	520	74	45,325	3,785
Total	523,458,670	41,672,484	347,636,890	35,363,647	440,514,068	37,736,863

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	364,437,873	30,308,330	334,042,167	24,755,344
Germany	12,290,636	885,462	23,360,114	1,404,632
France	6,948,354	590,268	3,430,430	242,151
Other Europe	38,070,306	2,946,276	40,961,400	2,570,582
British North America	5,014,263	357,065	10,327,253	494,943
Mexico	92,432	8,766	96,048	9,419
Central American States and British Honduras			267,216	18,391
Cuba	274,093	20,726		
Porto Rico	5,647,114	383,237	8,433,031	476,966
Santo Domingo	388,150	27,681	382,231	22,100
Other West Indies and Bermuda	28,203	2,025	86,080	2,185
Brazil	426,108	86,178	478,710	36,001
Colombia	21,618,509	1,824,175	14,499,313	965,346
Other South America	19,976	1,479	25,963	1,501
China	200,835	15,447	323,344	21,412
Other Asia and Oceanica	22,159	3,012	19,802	2,633
Africa	71,195	9,441	72,910	9,363
Other countries	25,041	1,790	72,896	4,498
Total	5,514	566	702	56
Total	455,580,061	37,411,944	436,859,060	31,057,506

HAMS.

Table showing the quantity and value of exports of hams, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.	Dollars.	Pounds.	Dollars.	Pounds.	Dollars.
United Kingdom.....	64,120,050	6,598,918	60,262,541	8,789,981	81,815,526	8,588,840
Germany.....	1,539,550	153,539	671,332	79,482	1,007,575	180,270
France.....	841,917	35,061	28,651	3,775	375,713	43,814
Other Europe.....	6,175,774	617,083	1,594,116	218,981	2,073,121	282,975
British North America.....	1,073,351	115,490	539,914	65,010	1,710,928	182,749
Mexico.....	815,729	39,422	283,385	38,840	228,964	28,131
Central American States and British Honduras.....	192,073	23,087	148,191	20,228	176,457	20,555
Cuba.....	5,397,799	618,400	5,755,240	767,197	4,664,390	568,964
Porto Rico.....	638,240	66,286	867,505	118,888	698,502	74,258
Santo Domingo.....	70,058	8,314	80,798	12,661	87,721	11,665
Other West Indies and Bermuda.....	1,094,325	132,162	1,049,458	151,876	1,077,201	128,173
Brazil.....	16,890	2,007	33,101	4,914	25,912	2,097
Colombia.....	119,062	12,504	80,009	10,282	90,139	9,804
Other South America.....	920,399	115,741	999,998	140,685	1,036,112	123,797
China.....	.....	.....	39,212	6,144	42,921	5,859
British Australasia.....	.....	.....	48,707	7,254	17,731	2,431
Other Asia and Oceanica.....	255,798	36,054	177,267	27,596	211,813	29,215
Africa.....	.....	.....	10,025	1,345	16,067	2,081
Other countries.....	25,637	2,996	6,102	849	18,378	2,100
Total.....	82,296,622	8,577,038	81,775,512	10,436,928	95,945,141	10,239,228

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	Pounds.	Dollars.	Pounds.	Dollars.
United Kingdom.....	91,810,688	9,049,187	125,572,760	12,158,319
Germany.....	1,843,375	182,105	2,395,363	224,265
France.....	446,739	45,514	676,120	65,815
Other Europe.....	6,255,648	644,681	16,394,656	1,607,420
British North America.....	2,551,990	259,685	3,782,487	368,815
Mexico.....	230,913	26,711	279,696	31,384
Central American States and British Honduras.....	.....	.....	.....	.....
Cuba.....	240,806	26,360	277,879	29,093
Porto Rico.....	3,563,790	373,389	4,000,893	371,658
Santo Domingo.....	856,590	85,950	868,534	78,920
Other West Indies and Bermuda.....	55,266	6,512	56,053	6,387
Brazil.....	1,153,961	128,679	1,228,235	127,566
Colombia.....	28,883	3,549	6,435	650
Other South America.....	102,360	9,561	137,119	11,925
China.....	870,828	100,774	829,449	90,475
British Australasia.....	49,015	6,641	49,653	6,025
Other Asia and Oceanica.....	13,390	1,756	14,430	1,933
Africa.....	243,924	31,687	261,728	34,175
Other countries.....	22,755	2,580	73,908	7,728
Total.....	14,665	1,549	7,454	790
Total.....	110,800,526	10,996,870	156,912,852	15,224,842

PORK.

Table showing the quantity and value of exports of pork (fresh and pickled), and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	13,150,005	1,215,928	10,206,136	906,353	15,424,573	1,184,916
Germany	4,405,800	279,084	783,100	70,937	2,086,525	197,532
France	184,000	12,045	35,100	3,385	214,650	15,866
Other Europe	3,259,522	200,378	628,200	57,258	1,118,300	85,830
British North America	13,809,694	812,337	8,874,380	738,126	8,710,250	602,050
Central American States and British Honduras	1,646,231	89,343	1,062,108	97,086	1,022,504	72,617
Cuba	757,400	51,780	629,095	60,725	675,928	47,930
Porto Rico	4,115,000	271,660	3,595,000	342,339	3,567,800	254,406
Santo Domingo	338,000	21,650	274,650	25,342	462,447	34,197
Other West Indies and Bermuda	20,565,362	1,654,476	19,248,531	1,779,784	23,641,608	1,751,672
Brazil	17,854	1,253	46,050	4,846	1,005,192	88,987
Colombia	163,950	10,207	103,655	9,916	105,414	7,800
Other South America	4,324,490	274,650	4,794,700	461,062	4,686,670	348,658
Asia and Oceania	144,550	10,907	161,080	12,726	152,785	10,641
Africa	135,084	8,409	60,914	5,751	78,337	6,056
Other countries	175,711	11,448	91,979	8,731	182,444	12,662
Total	78,193,253	4,925,594	50,594,673	4,584,347	63,675,407	4,701,872

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	14,595,365	992,358	11,448,868	867,074
Germany	1,744,950	115,945	1,749,236	93,845
France	210,600	16,719	159,700	9,231
Other Europe	1,138,769	73,675	1,231,486	69,348
British North America	14,216,052	849,954	13,581,099	650,619
Central American States and British Honduras	1,316,070	79,568	1,281,322	59,210
Cuba	191,960	12,050	250,000	12,130
Porto Rico	4,202,550	260,868	3,871,800	185,175
Santo Domingo	175,857	10,511	84,000	4,078
Other West Indies and Bermuda	25,975,756	1,601,193	24,198,515	1,170,973
Brazil	423,820	30,766	361,650	21,613
Colombia	85,420	5,327	123,390	6,338
Other South America	5,430,190	352,131	5,138,500	251,485
Asia and Oceania	163,860	11,882	153,757	10,548
Africa	96,600	6,411	109,300	5,813
Other countries	162,122	10,852	107,850	5,662
Total	70,129,941	4,430,155	63,869,513	3,223,147

BUTTER.

Table showing the quantity and value of butter exported, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	5,027,690	964,455	2,468,152	440,856	3,680,170	615,689
Germany	339,357	53,639	41,079	7,730	705,465	108,841
Other Europe	490,661	62,125	7,806	1,220	821,536	137,956
British North America	613,278	114,905	300,270	60,604	817,548	143,615
Mexico	120,723	28,472	161,242	37,709	124,717	25,055
Central American States and British Honduras	188,075	41,294	156,841	35,615	175,540	35,543
Cuba	207,890	41,916	181,870	39,965	97,178	20,840
Porto Rico	102,264	13,706	129,667	19,854	76,074	11,264
Santo Domingo	80,982	15,858	97,105	19,216	99,159	16,470
Other West Indies and Bermuda	3,004,728	525,227	2,175,472	442,136	1,920,258	341,556
Brazil	101,528	19,548	91,121	19,940	842,259	66,461
Colombia	142,963	28,144	105,362	22,133	157,674	29,978
Other South America	764,849	139,747	838,873	161,621	793,670	130,617
China ^a					5,381	1,182
Other Asia and Oceania	230,258	50,477	177,256	35,882	162,872	38,614
Africa	4,136	1,272	8,740	2,467	15,754	3,876
Other countries	6,052	1,272	3,434	749	42,749	7,753
Total	11,395,424	2,000,057	6,944,810	1,347,742	10,088,152	1,730,210

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	7,440,901	1,202,111	16,527,412	2,469,987
Germany	785,940	96,101	2,258,263	264,103
Other Europe	1,812,675	178,304	3,146,246	372,932
British North America	540,227	96,097	1,495,097	227,826
Mexico	171,263	92,711	208,875	35,837
Central American States and British Honduras	236,213	43,400	248,452	42,663
Cuba	55,372	11,790	46,334	8,566
Porto Rico	103,307	12,522	1,120	186
Santo Domingo	60,904	8,225	42,938	5,908
Other West Indies and Bermuda	2,086,866	327,491	1,994,962	300,228
Brazil	216,911	81,203	257,261	36,600
Colombia	82,166	12,270	119,219	16,885
Other South America	669,329	88,376	629,654	83,508
China	14,628	2,661	18,313	3,361
Other Asia and Oceania	283,134	49,652	203,591	37,835
Africa	6,096	1,455	7,740	1,401
Other countries	18,057	2,524	13,448	1,969
Total	14,086,499	2,194,103	27,220,213	3,906,900

^a Exports to China for 1892 and 1893 are included in "Other Asia and Oceania."

CHEESE.

Table showing the quantity and value of cheese exported, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	71,917,804	8,094,827	58,120,900	5,533,741	55,834,104	5,348,631
Germany	5,887	515	17,398	1,745	11,483	1,077
British North America	8,896,950	842,839	8,876,758	835,415	11,305,548	1,058,574
Mexico.....	121,712	16,175	156,055	19,139	104,518	13,625
Central American States and British Honduras.....	133,850	16,612	130,297	16,827	134,506	17,043
Cuba	215,472	30,101	233,375	33,942	159,531	23,491
Porto Rico.....	240,270	29,766	196,523	24,161	73,068	9,205
Santo Domingo.....	65,538	8,554	72,462	9,449	89,884	11,964
Other West Indies and Bermuda	1,034,127	126,227	1,010,589	130,396	1,015,718	125,069
Brazil	7,015	761	12,372	1,472	4,327	541
Colombia	63,919	8,480	63,632	8,557	48,987	6,414
Other South America.....	327,980	39,757	345,446	43,903	338,364	44,017
China					26,546	3,468
Other Asia and Oceanica ..	151,545	20,239	135,395	17,905	112,024	14,135
Other countries	2,739	376	3,600	395	48,026	5,420
Total.....	83,184,808	7,835,229	69,374,802	6,677,017	69,306,654	6,682,694

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom.....	33,251,910	2,758,602	36,297,922	3,113,691
Germany	6,812	628		
British North America.....	5,792,115	438,656	6,499,341	531,859
Mexico	112,079	13,252	126,112	14,789
Central American States and British Honduras.....	165,202	18,720	160,520	17,534
Cuba	38,029	6,559	41,454	7,571
Porto Rico	26,127	3,104	18,390	2,056
Santo Domingo	50,642	5,891	38,353	3,999
Other West Indies and Bermuda.....	900,712	102,481	884,205	101,331
Brazil	8,043	843	1,442	153
Colombia	73,037	8,356	81,629	9,649
Other South America	179,525	22,068	130,300	15,380
China	40,810	4,459	34,085	3,822
Other Asia and Oceanica.....	136,800	15,163	205,631	23,666
Other countries.....	19,091	2,335	10,640	1,203
Total	40,800,934	3,401,117	44,530,234	3,845,703

a Exports to China for 1892 and 1893 are included in "Other Asia and Oceanica."

LARD.

Table showing the quantity and value of exports of lard, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	148,712,680	11,516,867	132,188,415	13,795,394	160,132,123	13,153,864
Germany	110,897,062	8,333,671	59,322,415	6,112,063	107,024,301	8,707,398
France	25,872,830	1,992,495	16,618,449	1,672,252	33,914,883	2,785,608
Other Europe	96,372,980	7,598,766	59,755,642	6,174,843	89,783,975	7,449,058
British North America	4,010,086	292,670	1,524,013	143,177	3,745,209	278,065
Mexico	3,275,276	229,113	2,141,371	202,354	1,418,829	100,665
Central American States and British Honduras	1,963,061	165,965	1,724,794	173,363	2,225,664	186,844
Cuba	44,579,889	3,325,399	38,452,760	3,922,378	38,676,309	2,953,919
Porto Rico	3,544,062	264,407	3,675,522	371,449	3,458,258	262,874
Santo Domingo	457,199	37,249	414,098	42,555	604,683	48,436
Other West Indies and Bermuda	6,828,905	562,760	6,426,601	725,824	7,380,977	650,314
Argentina			147,304	18,434	16,296	1,653
Brazil	4,317,680	394,106	5,666,059	651,535	17,037,580	1,587,813
Colombia	1,299,426	101,750	1,797,887	187,176	1,844,607	141,000
Other South America	10,982,643	872,279	11,258,555	1,176,175	11,503,537	986,964
Asia and Oceania	412,943	37,732	356,572	37,578	348,127	31,380
Africa	319,918	30,683	314,715	33,703	542,769	48,629
Other countries	63,386	4,552	49,636	4,997	47,352	3,872
Total	463,910,026	35,790,474	341,834,808	35,445,240	479,705,479	39,378,351

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	214,175,787	15,731,003	187,510,210	10,790,156
Germany	113,848,030	8,036,588	151,087,295	8,324,635
France	35,642,529	2,598,955	26,732,335	1,530,736
Other Europe	77,326,329	5,572,577	83,943,570	4,844,003
British North America	5,933,530	415,351	4,964,444	245,762
Mexico	2,727,150	181,333	4,968,370	246,361
Central American States and British Honduras	2,139,175	152,046	2,046,916	120,585
Cuba	30,701,581	2,036,387	26,486,002	1,384,300
Porto Rico	3,861,694	258,945	4,092,726	218,393
Santo Domingo	506,165	36,797	364,700	20,611
Other West Indies and Bermuda	7,258,341	565,165	7,232,546	448,256
Argentina	35,332	2,753	84,067	4,792
Brazil	9,888,609	805,604	11,227,810	720,192
Colombia	1,668,563	113,440	2,521,790	138,589
Other South America	10,795,257	779,687	11,504,961	679,263
Asia and Oceania	382,535	31,419	402,480	29,662
Africa	473,939	40,427	1,097,180	72,961
Other countries	32,280	2,276	32,811	2,051
Total	517,306,756	37,348,753	520,320,203	29,821,308

TALLOW.

Table showing the quantity and value of exports of tallow, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	29,270,359	1,874,103	23,546,302	1,192,078	9,434,491	460,194
Germany	10,320,523	504,613	4,676,136	239,808	3,155,419	153,394
France	6,703,653	335,960	10,145,139	531,087	1,329,490	67,163
Other Europe	24,184,090	1,197,198	15,691,649	791,979	12,992,123	659,345
British North America	767,846	34,899	961,791	47,632	737,536	36,773
Mexico	1,538,540	82,006	2,434,902	137,868	1,642,168	86,817
Central American States and British Honduras	2,037,334	103,161	1,789,091	113,602	2,344,356	120,678
Cuba	880,868	31,919	902,787	42,560	939,540	46,977
Porto Rico	12,590	634	3,435	186	4,217	241
Santo Domingo	374,906	19,227	644,827	37,445	713,215	37,536
Other West Indies and Bermuda	96,348	6,864	922,946	56,374	1,025,099	52,693
Brazil	272,663	14,648	121,510	7,823	58,280	3,423
Colombia			42,220	2,954	71,322	4,424
Other South America	493,300	28,815	322,201	18,935	205,840	12,936
Asia and Oceania			24,386	1,190	500	25
Other countries	69,682	3,241	3,627	265	20,490	1,516
Total	87,022,614	4,237,563	62,233,139	3,211,736	34,683,618	1,782,086

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	5,136,879	242,269	29,216,759	1,125,591
Germany	2,627,632	120,805	10,918,519	423,231
France	400,204	19,366	22,981,248	878,090
Other Europe	7,507,434	383,318	14,000,093	559,599
British North America	685,447	32,176	689,685	27,223
Mexico	1,705,258	77,812	1,427,317	64,976
Central American States and British Honduras	2,853,249	150,470	2,757,174	123,066
Cuba	819,731	32,974	692,021	24,422
Porto Rico	5,593	331	4,611	226
Santo Domingo	738,527	37,309	596,528	23,865
Other West Indies and Bermuda	1,400,307	82,915	1,661,113	83,135
Brazil	49,649	2,990	71,100	2,979
Colombia	126,932	7,027	157,374	8,405
Other South America	265,788	15,380	242,754	10,724
Asia and Oceania	48,402	1,873	31,085	1,265
Other countries	6,593	335	1,730	85
Total	24,377,117	1,207,350	85,449,096	3,336,111

OLEO AND OLEOMARGARINE.

Table showing the quantity and value of exports of oleo and oleomargarine, and countries to which exported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country to which exported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom.....	6,751,267	669,536	7,852,993	804,529	8,962,455	872,115
Germany.....	21,082,014	2,061,531	26,072,638	2,650,119	28,403,990	2,629,875
France.....	2,347,810	214,990	1,471,785	138,851		
Other Europe.....	77,079,557	7,439,224	78,730,760	7,727,298	75,672,233	7,175,805
British North America....	1,129,890	128,686	1,378,135	136,309	1,577,246	149,098
Mexico.....			4,316	669	22,851	2,906
Central American States and British Honduras.....			11,871	1,838	17,644	2,003
Porto Rico.....	63,142	7,263	84,454	11,250	54,740	7,001
Other West Indies and Bermuda.....	1,698,035	193,715	2,420,071	301,056	2,777,559	342,068
Colombia.....			65,900	8,305	83,645	9,515
Other South America.....	200,030	24,821	395,692	48,076	445,961	54,831
Asia and Oceanica.....			18,150	2,601	77,960	9,717
Other countries.....	53,918	5,568	36,662	4,099	78,765	10,076
Total.....	110,405,669	10,743,333	118,543,327	11,834,720	118,195,049	11,235,010

Country to which exported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom.....	8,510,709	717,130	8,096,253	545,365
Germany.....	21,710,016	1,699,645	27,734,630	1,728,136
France.....				
Other Europe.....	56,251,362	4,959,093	80,130,458	5,582,605
British North America.....	1,142,482	92,420	1,647,835	83,626
Mexico.....	13,156	1,513	13,064	1,367
Central American States and British Hon- duras.....	7,375	873	2,895	334
Porto Rico.....	101,415	11,698		
Other West Indies and Bermuda.....	2,588,948	294,274	2,540,040	259,709
Colombia.....	91,407	9,579	88,031	7,813
Other South America.....	276,721	30,356	289,174	31,417
Asia and Oceanica.....	50,240	6,079	75,427	8,443
Other countries.....	22,882	2,213	63,400	7,004
Total.....	90,766,713	7,824,893	120,680,267	8,255,849

^a Includes for 1892, 47,342 pounds, valued at \$5,421, exported to Cuba.

HIDES AND SKINS.

Table showing the quantity and value of imports of hides and skins (other than fur skins), and countries from which imported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Country from which imported.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Pounds.	Dollars.	Pounds.	Dollars.	Pounds.	Dollars.
United Kingdom						2,893,456
France						832,708
Germany						734,505
Other Europe						1,495,161
British North America						591,315
Central America						158,213
Mexico						1,442,545
West Indies						240,654
South America						7,064,650
East Indies						1,503,490
Other Asia and Oceanica						756,671
Africa						357,228
Other countries						450,859
Total		28,144,440		22,797,740		18,541,449

Country from which imported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
	Pounds.	Dollars.	Pounds.	Dollars.
United Kingdom	46,601,152	5,333,604	18,998,105	2,707,057
France	16,579,517	2,401,677	3,456,689	978,797
Germany	17,776,093	2,190,212	3,376,601	695,369
Other Europe	24,937,623	3,254,263	9,448,976	1,650,952
British North America	18,037,702	1,265,493	18,721,484	1,189,858
Central America	1,733,278	224,442	1,810,962	234,369
Mexico	11,040,869	1,629,381	10,055,530	1,402,744
West Indies	2,885,686	317,455	4,929,140	429,210
South America	95,153,528	13,144,252	49,781,448	7,893,463
East Indies	26,053,337	3,243,852	10,545,405	1,487,946
Other Asia and Oceanica	13,920,532	2,128,048	6,393,846	1,107,895
Africa	6,320,423	950,703	3,780,828	369,720
Other countries	2,387,053	349,607	4,671,992	607,095
Total	263,516,793	36,432,989	148,159,006	20,713,528

WOOL, HAIR OF CAMEL, ETC.

Table showing the quantity and value of imports of wool, hair of the camel, goat, alpaca, etc., and countries from which imported, for the years 1892 to 1896, inclusive.

[Compiled from reports issued by Bureau of Statistics, Treasury Department.]

Importations.	1892.		1893.		1894.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
CLASS 1.—Clothing wool.	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
From all countries.....	51,313,983	9,309,640	30,778,327	5,573,238	32,533,599	5,315,919
CLASS 2.—Combing wool.						
From all countries.....	6,243,697	1,375,651	8,884,052	896,266	5,646,620	1,166,150
CLASS 3.—Carpet wool.						
From all countries.....	110,226,828	10,505,348	77,069,969	7,485,045	57,553,601	6,780,443
Manufactures (from all countries)		37,515,445		30,238,506		17,342,682

Country from which imported.	1895.		1896.	
	Quantity.	Value.	Quantity.	Value.
CLASS 1.—Clothing wool.	<i>Pounds.</i>	<i>Dollars.</i>	<i>Pounds.</i>	<i>Dollars.</i>
United Kingdom	71,292,503	11,992,520	31,369,876	5,612,010
France	5,634,884	1,351,971	5,400,299	1,482,336
South America.....	19,839,485	2,116,505	10,556,165	1,390,737
Asia and Oceania.....	13,366,103	1,096,221	9,385,500	3,423,470
Other countries	16,302,594	2,200,695	8,658,687	1,169,159
Total	126,435,569	19,657,912	75,370,527	13,077,712
CLASS 2.—Combing wool.				
United Kingdom	7,894,004	1,827,492	3,800,620	849,219
Other Europe	2,597,965	668,920	426,464	114,620
British North America.....	6,564,341	1,272,943	3,242,014	640,297
South America.....	1,158,106	138,159	2,363,053	359,110
Asia and Oceania.....	354,410	167,753	224,569	65,549
Other countries	188,216	17,396	14,239	3,374
Total	18,757,042	4,092,656	10,079,959	2,032,169
CLASS 3.—Carpet wool.				
United Kingdom	30,366,617	3,481,031	21,500,844	2,554,392
France	7,371,164	773,871	2,514,019	290,200
Germany	882,770	95,484	1,175,764	119,563
Other Europe	17,681,294	1,952,293	11,269,544	1,255,833
British North America.....	802,230	80,842	8,774	620
South America.....	16,166,876	1,462,910	15,144,952	1,426,354
China	23,711,306	1,510,572	18,643,524	1,277,665
Other Asia and Oceania.....	6,419,633	619,599	3,935,093	374,017
Other countries	364,716	42,989	143,015	12,889
Total	103,796,606	10,019,591	74,325,529	7,311,533
Manufactures (from all countries)		60,319,331		37,109,363

PUBLICATIONS OF THE FISCAL YEAR 1897.

The following is a list of the publications issued by the Bureau during the year. A special appropriation is made by Congress for publishing Farmers' Bulletins, and they are distributed free by the Secretary of Agriculture and by Senators, Representatives, and Delegates. The total number of copies of Farmers' Bulletins issued by this Bureau in 1897 amounted to 565,000. The reprints of this series of bulletins had wide circulation during the previous year.

	Copies.
Tapeworms of Poultry. Report upon the Present Knowledge of the Tapeworms of Poultry. By C. H. Wardell Stiles, A. M., Ph. D.—Bibliography of the Tapeworms of Poultry. By Albert Hassall, M. R. C. V. S. Pp. 88, pls. 21. Bulletin No. 12. July, 1896	3,000
Check List of the Animal Parasites of Geese (<i>Anser anser domesticus</i>). By Albert Hassall, Zoological Laboratory, Bureau of Animal Industry. Pp. 5. Circular No. 14. July, 1896	2,000
Check List of the Animal Parasites of Pigeons (<i>Columbia libia domestica</i>). By Albert Hassall, Zoological Laboratory, Bureau of Animal Industry. Pp. 4. Circular No. 15. August, 1896	2,000
Facts About Milk. By R. A. Pearson, B. S., Assistant Chief, Dairy Division, Bureau of Animal Industry. Pp. 29, figs. 8. Farmers' Bulletin No. 42. September, 1896	50,000
Reprint, February, 1897	20,000
Reprint, April, 1897	60,000
Tuberculosis Investigations. The Growth of the Tuberculosis Bacillus upon Acid Media. By E. A. de Schweinitz and Marion Dorset.—Further Experiments with an attenuated Tuberculosis Bacillus. By E. A. de Schweinitz and E. C. Schroeder.—The Effect of Tuberculin Injections upon the Milk of Healthy and Diseased Cows. By E. A. de Schweinitz. Prepared under the direction of Dr. D. E. Salmon, Chief of the Bureau of Animal Industry. Pp. 27, pls. 2, figs. 7. Bulletin No. 13. September, 1896	2,500
Statistics of the Dairy, compiled from the United States Census for 1890 and other reliable sources, with explanatory notes. By Henry E. Alvord, C. E., Chief of the Dairy Division, under the direction of Dr. D. E. Salmon, Chief of the Bureau of Animal Industry. Pp. 53, diagrams 5, map 1. Bulletin No. 11. (Reprint.) October, 1896	1,000
Dairying in California. By Prof. E. J. Wickson, M. A., University of California, under the direction of Dr. D. E. Salmon, Chief of the Bureau of Animal Industry. Pp. 31, map 1. Bulletin No. 14. October, 1896.	8,000
Hog Cholera and Swine Plague. By D. E. Salmon, D. V. M. Pp. 16. Farmers' Bulletin No. 24. (Reprint.) December, 1896	15,000
Reprint, January, 1897	50,000
Reprint, May, 1897	50,000
The Dairy Industry in Nebraska, South Dakota, and North Dakota. By John H. Monrad, Special Expert Agent, Dairy Division, under the direction of Dr. D. E. Salmon, Chief of the Bureau of Animal Industry. Pp. 21. Bulletin No. 16. December, 1896	4,500

	Copies.
Regulations for the Inspection and Quarantine of Animals Imported from Canada into the United States. Pp. 3. January, 1897.....	3,000
Exports of Animals and their Products. Pp. 3. Circular No. 17. January, 1897.....	10,000
Report of the Chief of the Bureau of Animal Industry for 1896. By D. E. Salmon. Pp. i-iii, 1-8, from Report of Secretary of Agriculture in Message and Documents. February, 1897.....	500
The Cheese Industry of the State of New York. By B. D. Gilbert, Special Expert Agent, Dairy Division, under the direction of Dr. D. E. Salmon, Chief of the Bureau of Animal Industry. Pp. 54. Bulletin No. 15. February, 1897.....	10,000
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List of Officials and Associations Connected with the Dairy Interests in the United States and Canada for 1897. Pp. 8. Circular No. 18. May, 1897.....	10,000
Butter Making on the Farm. By C. P. Goodrich, Dairy Inspector, Farmers' Institute Department, University of Wisconsin. Under supervision of the Dairy Division, Bureau of Animal Industry. Pp. 15. Farmers' Bulletin No. 57. June, 1897.....	100,000
Factory Cheese and How it is Made. By G. Merry, of Verona, N. Y. Pp. 8. Circular No. 19. Printed from Bulletin No. 15. June, 1897....	5,000

RULES AND REGULATIONS OF THE BUREAU OF ANIMAL INDUSTRY.

RULES AND REGULATIONS FOR COOPERATION BETWEEN THE U. S. DEPARTMENT OF AGRICULTURE AND THE AUTHORITIES OF THE STATES AND TERRITORIES FOR THE SUPPRESSION AND EXTIRPATION OF CONTAGIOUS PLEURO-PNEUMONIA OF CATTLE, IN ACCORDANCE WITH SECTION 3 OF THE ACT ESTABLISHING THE BUREAU OF ANIMAL INDUSTRY.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE COMMISSIONER,
Washington, D. C., July 1, 1885.

1. The properly constituted inspectors of the Bureau of Animal Industry are to be authorized by the governor of the State to make inspections of cattle and to be assisted by local police authorities when this is necessary.

2. In case of a discovery of contagious pleuro-pneumonia among the animals of any State the inspector will immediately report the existence of the disease, the number of animals affected, and the number exposed, to the governor of the State or to any officer or board which the governor may designate, and he will also report the same to the Bureau of Animal Industry.

3. When the governor of the State or other designated officer is satisfied of the existence of pleuro-pneumonia as reported, all the affected and exposed cattle and the infected stable and premises shall be placed in quarantine under State laws, such quarantine to remain in force until at least three months after the destruction of the last affected animal. The animals which are sick with the disease are to be immediately slaughtered by direction of State officers and under State laws and at the expense of the State. (In newly infected districts it is earnestly recommended that all exposed animals be immediately slaughtered.)

4. The rules of quarantine shall be such that no animal, sick or well, can leave the infected herd except for slaughter or be taken into it during the period of quarantine. The attendants of infected animals shall not be allowed to visit healthy herds except after change of clothing and shoes, nor shall any person from other premises be allowed to go among the infected cattle except by special permission.

5. The inspectors of the Bureau of Animal Industry shall be authorized to visit quarantined animals and inspect them as often as may be necessary, and no quarantine restrictions shall be removed until the Chief of the Bureau of Animal Industry certifies that this may be safely done.

6. The Chief of the Bureau of Animal Industry shall be authorized to carry out such measures of disinfection in regard to infected premises as he may consider necessary.

7. The salaries and expenses of the inspectors of the Bureau of Animal Industry, the necessary expenses of maintaining quarantine under the conditions prescribed above, and the expenses of disinfection will be paid out of the fund appropriated by Congress for the work of the Bureau of Animal Industry, in accordance with the law approved May 29, 1884; but no compensation will be allowed for the food or ordinary care of animals in quarantine.

8. In order to prevent the spread of the disease from one State or Territory into another the owners of infected herds in the various States and the railroad and transportation companies doing business in their vicinity will be notified by the Commissioner of Agriculture of the penalty provided for the violation of sections 6 and 7 of the act referred to.

NORMAN J. COLMAN,
Commissioner of Agriculture.

**RULES AND REGULATIONS FOR COOPERATION BETWEEN THE
U. S. DEPARTMENT OF AGRICULTURE AND THE AUTHORITIES
OF THE SEVERAL STATES AND TERRITORIES FOR THE SUP-
PRESSION AND EXTIRPATION OF CONTAGIOUS PLEURO-PNEU-
MONIA OF CATTLE.**

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE COMMISSIONER,
Washington, D. C., August 2, 1886.

Recent acts of Congress make it the duty of the Commissioner of Agriculture to prepare rules and regulations for the suppression and extirpation of the contagious pleuro-pneumonia of cattle, and authorize expenditures for investigation, disinfection, quarantine, and for the purchase of diseased animals for slaughter. The following are the sections bearing upon this subject:

SEC. 3. That it shall be the duty of the Commissioner of Agriculture to prepare such rules and regulations as he may deem necessary for the speedy and effectual suppression and extirpation of said diseases, and to certify such rules and regulations to the executive authorities of each State and Territory, and invite said authorities to cooperate in the execution and enforcement of this act. Whenever the plans and methods of the Commissioner of Agriculture shall be accepted by any State or Territory in which pleuro-pneumonia or other contagious, infectious, or communicable disease is declared to exist, or such State or Territory shall have adopted plans and methods for the suppression and extirpation of said diseases, and such plans and methods shall be accepted by the Commissioner of Agriculture, and whenever the governor of a State or other properly constituted authorities signify their readiness to cooperate for the extinction of any contagious, infectious, or communicable disease in conformity with the provisions of this act, the Commissioner of Agriculture is hereby authorized to expend so much of the money appropriated by this act as may be necessary in such investigations and in such disinfection and quarantine measures as may be necessary to prevent the spread of the disease from one State or Territory into another. (Approved May 29, 1884.)¹

BUREAU OF ANIMAL INDUSTRY.

For carrying out the provisions of the act of May twenty-ninth, eighteen hundred and eighty-four, establishing the Bureau of Animal Industry, one hundred thousand dollars; and the Commissioner of Agriculture is hereby authorized to use any part of this sum he may deem necessary or expedient, and in such manner as he may think best, to prevent the spread of pleuro-pneumonia, and for this purpose to employ as many persons as he may deem necessary, and to expend any part of this sum in the purchase and destruction of diseased animals whenever in his judgment it is essential to prevent the spread of pleuro-pneumonia from one State into another. (Approved June 30, 1886.)

In accordance with these laws I hereby certify the following rules and regulations for cooperation between the Department of Agriculture and the authorities of the several States and Territories, which I deem necessary to insure results commensurate with the money expended:

INSPECTION.

1. The necessary inspectors will be furnished by the Bureau of Animal Industry of the Department of Agriculture.

2. The properly constituted inspectors of the Bureau of Animal Industry, which are assigned to the respective States, are to be authorized by proper State authorities to make inspections of cattle under the laws of the State; they are to receive such protection and assistance as would be given to State officers engaged in similar work, and shall be permitted to examine quarantined herds whenever so directed by the Commissioner of Agriculture or the Chief of the Bureau of Animal Industry.

3. All reports of inspections will be made to the Bureau of Animal Industry, and a copy of these will then be made and forwarded to the proper State authorities. When, however, any inspector discovers a herd infected with contagious pleuro-pneumonia, he will at once report the same to the proper State authority, as well as to the Bureau of Animal Industry.

4. The inspectors, while always subject to orders from the Department of Agriculture, will cordially cooperate with State authorities and will follow instructions received from them.

¹ See Report of Bureau for 1884, p. 473.

QUARANTINE.

5. When contagious pleuro-pneumonia is discovered in any herd, the owner or person in charge is to be at once notified by the inspector, and the quarantine regulations of the State in which the herd is located are to be enforced from that time. The affected animals will be isolated, when possible, from the remainder of the herd until they can be properly appraised and slaughtered.

6. To insure a perfect and satisfactory quarantine, a chain fastened with numbered lock will be placed around the horns, or with hornless animals around the neck, and a record will be kept showing the number of the lock placed upon each animal in the herd.

7. The locks and chains will be furnished by the Department of Agriculture, but they will become the property of the State in which they are used, in order that anyone tampering with them can be proceeded against legally for injuring or embezzling the property of the State.

8. Quarantine restrictions once imposed are not to be removed by the State authorities without the consent of the proper officers of the Department of Agriculture.

9. The period of quarantine will be at least ninety days, dating from the removal of the last diseased animal from the herd. During this period no animal will be allowed to enter the herd or to leave it, and all animals in the herd will be carefully isolated from other cattle.

When possible, all infected herds are to be held in quarantine and not allowed to leave the infected premises except for slaughter. In this case fresh animals may be added to the herd at the owner's risk, but are to be considered as infected animals and subjected to the same quarantine regulations as the other members of the herd.

SLAUGHTER AND COMPENSATION.

10. All animals affected with contagious pleuro-pneumonia are to be slaughtered as soon after their discovery as the necessary arrangements can be made.

11. When diseased animals are reported to the State authorities, they shall promptly take such steps as they desire to confirm the diagnosis. The animals found diseased are then to be appraised according to the provisions of the State law, and the proper officer of the Bureau of Animal Industry (who will be designated by the Commissioner of Agriculture) notified of the appraisement. If this representative of the Bureau of Animal Industry confirms the diagnosis and approves the appraisement, the Department of Agriculture will purchase the diseased animals of the owner and pay such a proportion of the appraised value as is provided for compensation in such cases by the laws of the State in which the animals are located when they are condemned and slaughtered by State authority.

DISINFECTION.

12. All necessary disinfection will be conducted by the employees of the Bureau of Animal Industry.

INOCULATION.

13. Inoculation is not recommended by the Department of Agriculture, and it is believed that its adoption with animals that are to be afterwards sold to go into other herds would counteract the good results which would otherwise follow from the slaughter of the diseased animals. It may, however, be practiced by State authorities under the following rules:

14. No herds but those in which pleuro-pneumonia has appeared are to be inoculated.

15. Inoculated herds are to be quarantined with lock and chain on each animal, the quarantine restrictions are to remain in force as long as any inoculated cattle survive, and these animals are to leave the premises only for immediate slaughter.

16. Fresh animals are to be taken into inoculated herds only at the risk of the owner, and shall be subject to the same rules as the other cattle of the inoculated herd.

17. The Chief of the Bureau of Animal Industry is to be promptly notified by the State authorities of each herd inoculated, of the final disposition of each member of the herd, of the post-mortem appearances, and of any other facts in the history of the herd which may prove of value.

The cooperation of the governors, of State live stock commissions, and of other officers who may be in charge of the branch of the service provided for the control of the contagious diseases of animals in the States where pleuro-pneumonia exists, is earnestly requested under these rules and regulations, which have been

framed with a view of securing uniform and efficient action throughout the whole infected district. It is hoped that with a vigorous enforcement of such regulations the disease may be prevented from extending beyond its present limits, and may be in time entirely eradicated.

NORMAN J. COLMAN,
Commissioner of Agriculture.

By virtue of the authority imposed upon me as governor of the State of _____, I hereby accept the above rules and regulations, and the proper officers of this State will cooperate with the United States Department of Agriculture for their enforcement.

_____,
_____, 1886.

RULES AND REGULATIONS FOR THE SUPPRESSION AND EXTIRPATION OF CONTAGIOUS, INFECTIOUS, AND COMMUNICABLE DISEASES AMONG THE DOMESTIC ANIMALS OF THE UNITED STATES.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE COMMISSIONER,
Washington, D. C., April 15, 1887.

In pursuance of an act of Congress entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," approved the 29th day of May, 1884,¹ and of section 3 of said act, the following rules and regulations are hereby prepared and adopted for the speedy and effectual suppression and extirpation of contagious, infectious, and communicable diseases among the domestic animals of the United States:

RULES AND REGULATIONS.²

1. Whenever it shall come to the knowledge of the Chief of the Bureau of Animal Industry of the Department of Agriculture that there exists, or there is good cause to believe there exists, any contagious, infectious, or communicable disease among domestic animals in any part of the United States, and he believes there is danger of such disease spreading to other States or Territories, he shall at once direct an inspector to make an investigation as to the existence of said disease.

2. Said inspector shall at once proceed to the locality where said disease is believed to exist and make an examination of the animals said to be affected with disease, and report the result of such examination to the Chief of the Bureau of Animal Industry.

3. Should the inspector on such investigation find that a contagious, infectious, or communicable disease exists among the animals examined, and especially pleuro-pneumonia, he shall direct the temporary quarantine of said animals and the herds among which they are, and adopt such sanitary measures as may be necessary to prevent the spread of the disease, and report his action to the Chief of the Bureau. He will further notify in writing the owner or owners, or person or persons in charge of such animal or animals, of the existence of the contagious disease, and that said animal or animals have been placed in quarantine, and warn him or them from moving said animal or animals under penalty of sections 6 and 7 of the act of Congress approved May 29, 1884.

4. When the Chief of the Bureau of Animal Industry is satisfied of the existence of any contagious disease among domestic animals in any locality of the United States, and especially of pleuro-pneumonia, and that there is danger of said disease spreading to other States or Territories, he will report the same to the Commissioner of Agriculture, who will quarantine said locality in the mode and manner as provided in rule 12. He shall cause a thorough examination of all animals of the kind diseased in said locality, and all such animals found diseased he will cause to be slaughtered. He shall establish a quarantine for a period of not less than ninety days of all animals that have come in contact with diseased animals, or have been on premises or in buildings on or in which diseased animals have been, or have been in any way exposed to disease; and shall make and enforce all such

¹ See Report of Bureau for 1884, p. 473.

² See amendments on pp. 329, 335.

sanitary regulations as the exigencies of the case may require. He will cause to be disinfected in such manner as he deems best all sheds, corrals, yards, barns, and buildings in which diseased animals have been, and until such premises and buildings have been so disinfected and declared free from contagion by a certificate in writing signed by an inspector of the Bureau of Animal Industry, no animal or animals shall be permitted to go upon or into said premises and buildings. Should, however, any animal or animals be put upon said premises or into said buildings in violation of this rule and regulation, then such animal or animals shall be placed in quarantine for a period of not less than ninety days, and said premises or buildings be again disinfected. Said second disinfection and the quarantine of such animals to be at the expense of the owner of said premises or buildings.

5. All animals quarantined by order of the Chief of the Bureau of Animal Industry shall have a chain fastened with a numbered lock placed around their horns, or, in case of hornless animals, placed around their necks; and a record will be kept, showing the number of lock placed upon each animal, name and character of animal and marks of identification, name of owner, locality, and date of quarantine. The Chief of the Bureau, however, may, in his discretion, in place of chaining said animals, cause the animals to be branded in such manner as he may designate, or may place a guard over the same.

6. All animals quarantined will be deemed and considered as "affected with contagious disease," and any person or persons moving said quarantined animals from the infected district will be prosecuted under sections 6 and 7 of the act of Congress establishing the Bureau of Animal Industry, approved May 29, 1884.

7. Whenever in the judgment of the Chief of the Bureau of Animal Industry it becomes necessary to kill animals that have been exposed to the contagious disease known as pleuro-pneumonia, in order to prevent the spread of said disease from one State or Territory to another, he shall cause the same to be slaughtered.

8. All animals diseased with pleuro-pneumonia, and all animals exposed to pleuro-pneumonia, that have been condemned to be slaughtered, shall be first appraised as to their value at the time of their condemnation. Said appraisement shall be made in the mode and manner provided for by the law of the State in which they are located, and such compensation on their appraised value will be paid as is provided for by the law of such State. In case such State has no law for the appraisement of the value of animals diseased with pleuro-pneumonia, or that have been exposed to pleuro-pneumonia, or either, then the Chief of the Bureau of Animal Industry shall direct an inspector of the Bureau to convene a board of appraisers to consist of three members, one of whom said inspector shall appoint, one to be appointed by the owner of the animal or animals condemned, and these two will appoint the third; in case the said owner shall neglect or refuse to name an appraiser, then by two appraisers to be appointed by said inspector. This board will appraise the value of the animals condemned and certify to the same in writing under oath, and the amount so fixed by said board shall be paid to the owner of the animals condemned. Should the owner of the animals condemned be dissatisfied with the appraisement, he may appeal from said appraisement to the circuit court of the United States, and the amount found by said court to be the value of the condemned animals will be paid to the owner.

9. Whenever it is deemed necessary by the Chief of the Bureau of Animal Industry to supervise and inspect any of the lines of transportation operating in the United States that do business in and through more than one State or connect with lines doing business in and through other States, and the boats, cars, and stock yards in connection with the same, he shall designate suitable inspectors for that purpose, and make all necessary regulations for the quarantine and disinfection of all stock yards, cars, boats, and other vehicles of transportation in which have been, or in which have been transported, animals affected with a contagious disease or suspected to have been affected with such a disease. Such cars and other vehicles of transportation declared in quarantine shall not be again used to transport, store, or shelter animals or merchandise until certified to be free of contagion by a certificate signed by the inspector supervising their disinfection, and such stock yards shall not again have animals placed in them until likewise declared free of contagion.

10. All quarantined stock, premises, and buildings will be under the charge and supervision of an inspector of the Bureau of Animal Industry, and shall be in no case free from quarantine until so ordered by the Chief of the Bureau.

11. Whenever any inspector of the Bureau of Animal Industry is prevented or obstructed or interfered with in the discharge of his duty in the examining of animals suspected to have a contagious disease, or in placing under quarantine animals or premises, or in disinfecting them, he will report the same to the Chief of the Bureau. He will also call upon the sheriff or other police authorities of

the locality where said obstruction or interference occurs for aid and protection in the performing of his duty. Should such sheriff or police authorities neglect or refuse to render such aid and protection he will then apply to the United States marshal of said district for the necessary force and assistance needed to protect him in the carrying out of the duties imposed upon him by these rules and regulations and the provisions of the law by authority of which they are made. He will also file with the United States district attorney information of all the facts connected with such obstruction and interference, and the names of the party or parties causing the same.

12. Should, from any cause, the Chief of the Bureau of Animal Industry find that it is impossible to enforce these rules and regulations in any State, and that in consequence thereof there is great danger that pleuro-pneumonia will spread from said State to other States and Territories, he will report the same to the Commissioner of Agriculture. Thereupon the Commissioner of Agriculture, if he believes the exigency of the case requires it, will declare said State, in which pleuro-pneumonia exists, and in which it is impossible to carry out these rules and regulations, to be quarantined against the exportation of animals of the kind diseased to any other State, Territory, or foreign country. Said order of the Commissioner declaring the quarantine of a State will be published in at least two papers in said State once a week during the existence of said quarantine, and in such other papers as he may select. Notification of the order declaring said quarantine will be certified to the governor of the State quarantined, as well as to the governors of all other States and Territories, and to the agents of all transportation companies doing business in or through said State. All animals of the kind quarantined against in said State will be deemed as animals "affected with contagious disease," and any person moving or transporting any of said animals to any other State or Territory, or delivering any of such animals to any transportation company to be so transported, will be prosecuted under sections 6 and 7 of the act of Congress approved May 29, 1884. Provided, however, that any animal of the kind quarantined against that has been examined by an inspector of the Bureau of Animal Industry, and by a certificate in writing signed by such inspector declared to be free from pleuro-pneumonia, may be exported to any other State or Territory; and provided further, that said animal shall be exported within forty-eight hours after such examination and signing of said certificate, so that said animal may not be exposed to disease before leaving said State.

13. Before giving the certificate provided for by rule 12 the inspector must be furnished with an affidavit made by two reputable and disinterested persons, stating that they have known the animals to be examined for a period of six months immediately prior to the date of examination, and that during that time the animals have not been exposed to pleuro-pneumonia; that they have not been in any of the buildings or on any of the premises or among any of the herds known to be affected with pleuro-pneumonia, or suspected to be so affected. The inspector may also require further proof as to whether said animals to be examined have been exposed to pleuro-pneumonia.

14. All rules and regulations heretofore made are hereby revoked, and these rules and regulations will be in full force and effect on and after the 15th day of April, 1887.

NORMAN J. COLMAN,
Commissioner of Agriculture.

INSTRUCTIONS TO INSPECTORS OF THE U. S. BUREAU OF ANIMAL INDUSTRY.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY,
Washington, D. C., May 27, 1887.

1. Inspectors are to carefully study and familiarize themselves with the rules and regulations prepared by the Commissioner of Agriculture of date April 15, 1887,¹ and follow them strictly in carrying out the work they are detailed to do by the Chief of the Bureau.

2. No step or action of any kind is to be taken by any inspector without first receiving *express instructions* from the Chief of the Bureau, except as is provided for in rule 3.

3. They will promptly make the reports called for by the rules, giving the fullest information possible of the facts relating to each case, and make all sug-

¹ See p. 327.

gestions that they think proper, in order that the chief may be fully advised, so as to issue the proper instructions. Should they at any time be in doubt as to the proper action to be taken they will ask for further orders, and explain the difficulty. In all cases of importance, and whenever they believe the circumstances require immediate action, they will use the telegraph in requesting orders.

4. As there exists much hostility among owners of animals to the work intrusted to this Bureau, inspectors are to act with the utmost caution and civility in the performance of their official duties. They will avoid as far as possible all assumption of authority in making examinations and inspections of animals and premises; first requesting as a *favor* or *privilege* permission to examine, and endeavor to persuade owners and persons in charge to grant the same. It is the wish of the Bureau to allay all the opposition, if possible, that may exist as to its work, and have its officers secure the friendly aid and assistance of those for whose benefit the law has been made. The Bureau believes that its inspectors can secure this by being courteous and avoiding unnecessary friction with the public. Should an inspector fail in this manner in obtaining permission to make an examination, he will then present a copy of the rules and regulations of April 15, 1887, together with the act of Congress of May 29, 1884,¹ to the owners or persons in charge, and quietly but firmly insist upon making the examination. If permission is still refused the inspector will proceed to enter the premises and make the examination. But should any force, or show of force, or threats of force be made against the inspector, in his attempt to enter on the premises or to make the examination, he will relinquish the attempt and report at once all the circumstances fully to the Chief of the Bureau, as provided in rule 11, and wait for orders. The chief will then direct him as to whether he shall secure the assistance provided for by said rule.

5. Inspectors will prepare and carefully keep a daily journal. In this will be stated daily each and every act done by the inspector, giving the fullest detail of his work, the name and residence of the owners of animals inspected, the character of animals and their condition, and the character and condition of the premises in which they are kept; the attitude of owners toward the work of the Bureau and any other information he may think will be of interest; in case of contagion, as far as can be obtained, a history of the animals diseased, how, if known or conjectured, they contracted the disease, number in herd, number quarantined, date of quarantine, and all other particulars useful to be known. Also a register, in which is to be entered a brief statement of work done each day, ruled and filled out in like manner as blank Form F for the daily reports.

6. It is necessary that the Bureau shall be kept fully advised daily of the progress of all work being done by inspectors. To accomplish this purpose daily reports—Form F—are to be made out and forwarded to the Bureau. These reports are to be made by the chief inspector of each district, or by the inspector in charge of work at any place. All inspectors at work under a chief inspector will forward daily to said chief inspector all reports required by the rules and instructions, who will from said reports make up his daily report, and forward it to the Bureau, together with all the reports, vouchers, etc., received by him from inspectors under his charge. When no work of the kind specified on the blank has been done in the district or place for which the report is made, that fact will be so stated on the report, and also a statement of what work is being carried on. In addition, inspectors in charge are required from time to time to forward written reports of the cases they and those under them are at work upon, and progress being made in the same, in like manner as heretofore.

7. Notice of temporary quarantines provided by rule 3 will be made in duplicate—one copy to be served on the owner or persons in charge of the animals, the other indorsed with the time, place, and person on whom served, to be forwarded to the Bureau. The inspectors will also keep a record of the same. This is to be done whenever a herd is found infected. Inspectors will also see that the State authorities place the State quarantine on the infected herd. *Both quarantines are required*; the first to prevent the quarantined animals leaving the State, the second to prevent them from being moved to other places within the State. Inspectors will notify the Bureau of the date that the State quarantine of the herd is made.

8. When the diagnosis of disease has been confirmed in the manner provided by instruction 12, the animals of the herd quarantined are to be locked, or tagged, and numbered. A report of this record, as specified in rule 5, will be made and sent to the Bureau on blank Form K.

9. In convening boards of appraisement under rule 8, the certificate of appraisement is to be made and sworn to in duplicate, one copy to be for the benefit of the

¹ See Report of Bureau for 1884, p. 473.

owner, the other to be at once forwarded to the Bureau. Whenever it is impossible to have the oaths administered to the appraisers and owners by a notary public or justice of the peace, the signatures of the appraisers to Form C and of owners to Form E may be attested by a witness. This, however, is to be done only in cases where an agreement as to price is made with the owner, and he does not object to the killing of his cattle. Appraisers are to be directed that cattle are not to be valued at more than they would bring at public auction, and when appraisements are made in excess of such values in the judgment of the inspector he will disapprove such appraisements and convene a new board. In all cases where possible it will be best, before the appraisement is made, to secure the owner's consent to the maximum valuation that will be approved. Whenever owners object to the killing of their cattle, and no amicable arrangement can be made, inspectors will pursue strictly the mode and manner of making appraisements as prescribed by the rules and regulations and the law of the State in which it is to be made.

10. No animal shall be killed unless expressly ordered by the Chief of the Bureau, which order will be sent after the appraisement of the animal is approved and the amount to be paid to the owner shall have been fixed by the chief and a release and quitclaim of all demands against the United States has been signed by the owners. Blanks for this purpose will be furnished inspectors—Form E.

11. A post-mortem examination must be made of every animal killed and a report of the result of such examination must be made in writing to the Chief of the Bureau. It must state name of owners, character of animal, date of the quarantine, and the number of animal quarantined, if chained or locked or numbered in any other way. These reports are to be forwarded with the daily reports.

12. Whenever an inspector discovers the existence of pleuro-pneumonia he will, in addition to reporting in the manner provided by the rules, likewise report it to the chief inspector of his district. The chief inspector will himself proceed to the locality for the purpose of verifying the diagnosis, or in case of his being otherwise engaged the Chief of the Bureau will detail another inspector to make the verification. The result of this examination should be reported at once to the Bureau. Should the diagnosis be confirmed, a notice of the fact of the discovery of pleuro-pneumonia is to be sent at once to the State veterinarian or board of State sanitary commissioners, and an invitation extended to them to make an examination and cooperate with this Bureau.

13. It is deemed necessary and essential that the utmost harmony and friendly relations should exist between the officers of this Bureau and State officers, and that hearty cooperation be secured. Inspectors are requested to do everything in their power to maintain such relations, and to consult with and receive from State officers all suggestions and assistance that can be obtained. All friction is to be avoided.

14. The certificate provided for in rule 12 is to be made in duplicate, one copy to be given to the shipper and the other to be forwarded to the Bureau. These certificates have on the backs the affidavits for the citizens and owners to make oath to, and are to be executed in duplicate. When additional proof is required by the inspector, such proof is to be forwarded with the duplicate certificate or permit to the Bureau.

15. The reports provided for by these instructions are to be commenced and forwarded on and after June 1, 1887.

16. These instructions may be from time to time altered, amended, or suspended by the Chief of the Bureau in his discretion, and special instructions to govern particular cases will be sent as the circumstances may require.

D. E. SALMON, *Chief of Bureau.*

NOTICE CONCERNING PLEURO-PNEUMONIA.

U. S. DEPARTMENT OF AGRICULTURE,
COMMISSIONER'S OFFICE,
Washington, D. C., May 31, 1887.

To the managers of all railroads and transportation companies in the United States:

Your attention is called to the fact that contagious pleuro-pneumonia exists among cattle in the States of Illinois, Maryland, and New York, and that the infected districts in said States have been duly quarantined by the Department of Agriculture in the manner provided by the act of Congress of March 29, 1884,¹ establishing the Bureau of Animal Industry.

¹ See Report of Bureau for 1884, p. 473.

The existence of this contagious disease in such important cattle centers as these States is a danger so menacing to the cattle interests of the United States that it calls for the most prompt, thorough, and energetic measures that can be taken, not only by the National Government, but also by all parties interested in the preservation of the great cattle industry of the country.

No persons or class of persons are more interested in the safety and growth of this industry than transportation companies, who derive a very large proportion of their earnings from the shipment of cattle and their products, and none should be more active and energetic in enforcing such measures as are necessary to stamp out this disease and prevent its possible spread.

The insidious character of this disease, its easy and imperceptible propagation by contact with animals having the germs of disease and giving no outward symptoms of its presence, the contraction of the plague from infected cars, the spreading of the germs by means of manure carried in uncleansed cars from place to place, all make it a matter of grave concern and render it necessary that stringent measures should be adopted to protect the cattle interests of the country from this great evil.

I have, therefore, to suggest and to request that all transportation companies shall establish on their respective lines a rule, and see that it is rigidly enforced, that all cars that have carried live stock shall be thoroughly cleansed on the discharging of their freight, and not allowed to leave the freight or stock yards before this is done; also that the said cars shall be carefully disinfected in the following manner:

1. Remove all litter and manure.
2. Wash the car with water thoroughly and until clean.
3. Saturate the walls and floors with a solution made by dissolving 4 ounces of chloride of lime to each gallon of water. Stock yards and pens should be cleansed and disinfected at least once a week.

Transportation companies having connections with infected districts should require parties offering cattle for shipment to present at point of loading affidavits of the owner and two disinterested persons stating that the cattle to be shipped have been known to affiants for at least six months next preceding, and that said cattle have not been in any of said districts, and have not come in contact with any cattle from said districts. Said affidavits should be attached to and accompany the waybill to point of destination.

As several very extensive outbreaks of pleuro-pneumonia have recently been traced to cattle that had been shipped from infected districts a considerable distance by rail, the necessity of these precautions can not be overestimated, and if enforced they would be a material safeguard against the spread of this disease.

Railroad companies can be of the greatest assistance to the Bureau of Animal Industry in its work of extirpating pleuro-pneumonia if they will cooperate with it and assist in maintaining the rules and regulations prescribed by me on April 15, 1887,¹ and the quarantine orders since made.

I hope this support and assistance will be cordially given.

Very respectfully,

NORMAN J. COLMAN,
Commissioner of Agriculture.

CONCERNING TRANSPORTATION OF CATTLE

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., July 3, 1889.

To the Managers and Agents of Railroad and Transportation Companies of the United States:

In accordance with section 7 of an act of Congress approved May 20, 1884,² entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," you are hereby notified that a contagious and infectious disease known as splenic, or Texas, fever exists among cattle in the following-described area of the United States:

All that country lying south and east of a line commencing at the northeasterly corner of the county of Crittenden, in the State of Arkansas, thence running in a northwesterly direction to the Osage Agency, in the Indian Territory, and thence running southwesterly to the Rio Grande River, at the intersection of the south-

¹ See p. 327.

² See Report of the Bureau for 1884, p. 473.

easterly corner of Pecos County and the northeasterly corner of Presidio County, in the State of Texas.

No cattle are to be transported from said area to any portion of the United States north or west of the above-described lines except in accordance with the following regulations:

First. On unloading north or west of this line any cattle in course of transportation to be fed or watered on the way, the places where said cattle are to be so fed and watered shall be set apart and no other cattle shall be admitted into said places. Once a week from the date hereof until the 1st day of December, 1889, these watering and feeding places shall be thoroughly cleansed and disinfected.

Second. On unloading said cattle at their points of destination the regulations relating to the movement of Texas cattle prescribed by the cattle sanitary officer of the State where unloaded shall be carefully observed. The cars that have carried said stock shall be cleaned and disinfected before they are again used to transport, store, or shelter animals.

The cars used to transport such animals and the pens in which they are fed and watered shall be disinfected in the following manner:

(a) Remove all litter and manure. This litter and manure may be disinfected by mixing with lime, diluted sulphuric or carbolic acid, or if not disinfected it may be stored where no cattle can come in contact with it until after December 1.

(b) Wash the cars and the feeding and watering troughs with water until clean.

(c) Saturate the walls and floors of the cars and the fencing, troughs, and chutes of the pens with a solution made by dissolving four ounces of chloride of lime to each gallon of water.

The losses resulting yearly to the owners of Northern cattle by the contraction of this disease from contact with Southern cattle and through infected cars and by means of the manure carried in unclean cars from place to place have become a matter of grave and serious concern to the cattle industry of the United States. It is necessary, therefore, that this cattle industry should be protected as far as it is possible by the adoption of methods of disinfection in order to prevent the dissemination of this disease.

A rigid compliance with the above regulations will insure comparative safety to Northern cattle and render it unnecessary to adopt a more stringent regulation, such as the absolute prohibition of the movement of Texas cattle except for slaughter during the time of year that this disease is fatal.

Inspectors will be instructed to see that disinfection is properly done, and it is hoped that transportation companies will promptly put in operation the above methods.

Very respectfully,

J. M. RUSK, *Secretary.*

CONCERNING TRANSPORTATION OF CATTLE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., August 10, 1889.

To the managers and agents of railroads and transportation companies of the United States:

In addition to my order of July 3, 1889,¹ in regard to cleaning and disinfecting cars and pens which have been occupied by cattle liable to disseminate splenic or Texas fever, I desire to impress upon you the importance of special precautions to prevent the infection of cattle which have been selected for exportation. The number of cattle shipped to Europe has rapidly increased and the trade is probably more promising than ever before. This relieves our markets, gives new vigor to the cattle industry, and proportionally increases the business of transportation companies.

It is feared by shippers that some of these export cattle may become infected from cars which had carried Southern cattle before the regulations of July 3, 1889, went into effect. A single shipment of animals thus affected might lead other countries to prohibit the entrance of our cattle and consequently ruin this trade, which is now of so much importance to the country. Not desiring at present to make a regulation requiring that all stock cars should be cleaned and disinfected before cattle are loaded into them, I would earnestly request the managers of all transportation companies doing business between the interior and the seaboard to make provision whereby all cars, in which cattle for export are to be transported,

¹ See p. 332.

shall be thoroughly cleaned and disinfected previous to loading, in accordance with the instructions contained in my order of July 3.

Arrangements have been made at New York by which one yard, accessible to all railroad companies, has been set apart exclusively for export cattle. I understand that one of the trunk lines between Chicago and New York has already, at the request of shippers, instructed its agents to furnish disinfected cars for such cattle, and I trust that all others will immediately give the export trade the benefit of similar precautions, thus avoiding the necessity for an extension of the order of July 3 to include all cars in which cattle are transported.

Very respectfully,

J. M. RUSK, *Secretary.*

REGULATIONS FOR THE INSPECTION OF SALTED PORK AND BACON FOR EXPORT.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., September 12, 1890.

By virtue of the authority conferred upon the Department of Agriculture by section 1 of an act entitled "An act providing for the inspection of meats for exportation, prohibiting the importation of adulterated articles of food or drink, and authorizing the President to make proclamation in certain cases, and for other purposes," approved August 30, 1890 [appended hereto], the following regulations for the inspection of salted pork or bacon for export, and the marks, stamps, or other devices for the identification of the same, are hereby prescribed:¹

1. Whenever any foreign country, by its laws, regulations or orders, requires the inspection of salted pork or bacon imported into such country from the United States, all packers or exporters desiring to export to said country shall make application to the Secretary of Agriculture for such inspection; also, whenever any buyer, seller, or exporter of such meats intended for exportation shall desire inspection thereof, he shall likewise make application to the Secretary of Agriculture for such inspection.

2. The application must be in writing, and shall give the name of the packer of such meats, and, if the packer be the exporter, the probable amount of such meats to be exported per week or month for which inspection is requested; the name of the country or countries to which such meats are to be exported; the place at which inspection is desired and the date for such inspection. The applicant shall likewise agree to abide by these regulations, and to mark his packages as herein-after provided.

3. Every package containing salted pork or bacon which has been inspected must be branded or stenciled both on the side and on the top by the packer or exporter, as follows:

FOR EXPORT.

- a. (Here give the name of the packer.)
- b. (Here the location and State of the factory where packed.)
- c. (Here give the net weight of the salted pork or bacon contained in the package.)
- d. (If exported by other than packer, the name of the exporter.)
- e. (Name of consignee and point of destination.)

The letters and figures in the above brand shall be of the following dimensions: The letters in the words "For export" shall not be less than three-fourths of an inch in length, and all the other letters and figures not less than one-half inch in length. All letters and figures affixed to the top and sides shall be legible, and shall be in such proportion and of such color as the meat inspector of the Department of Agriculture may designate.

4. The meat inspector of the Department of Agriculture, having, after inspection, satisfied himself that the articles inspected are wholesome, sound, and fit for human food, shall affix to the top of said package a meat-inspection stamp, to be furnished by the Department of Agriculture, said stamps bearing serial numbers, and the inspector will write on said stamp the date of inspection. The stamp must be securely affixed by paste and tacks, in such a way as to be easily read when the package is standing on its bottom. Not less than five tacks shall be driven through each stamp, one at each corner and one in the middle of the stamp.

¹ See additional regulations on p. 343.

The stamp having been affixed, it must be immediately canceled. For this purpose the inspector will use a stencil plate of brass or copper, in which will be cut five parallel waved lines long enough to extend beyond each side of the stamp on the wood of the package. At the top of said stencil will be cut the name of the inspector and at the bottom of said stencil will be cut the district in which inspection is made. The imprinting from this plate must be with blacking or other durable material, over and across the stamp, and in such manner as not to deface the reading matter on the stamp; that is, so as not to daub and make it illegible. The stamp having been affixed and canceled, it must immediately be covered with a coating of transparent varnish or other substance. Orders for stamps must be made by the inspector on the Chief of the Bureau of Animal Industry. The inspector, having inspected and found wholesome the contents of said package and affixed the stamp thereon, will issue to the packer or exporter a certificate of inspection, reciting the time and place of inspection, the name of the packer, the name of the exporter, and the name of the consignee and country to which exported. He will also place on said certificate the number of the package. One certificate only will be issued for each consignment, and must designate the stamp numbers of all the packages contained in said consignment.

5. The inspector will enter in the stub of his stamp book the information given by the packer's brand on the package inspected, and will report daily on blank form (*M. I. 1*) the number of stamps issued on each date and all the information required by said blank.

6. The certificates of inspection will be furnished by the Department of Agriculture and be issued in serial numbers and in triplicate form. The inspector will deliver one copy of said certificate to the consignor or shipper of such meat inspected, one copy he will attach to the invoice or shipping bill of such meat, and the third copy he will forward to the Chief of the Bureau of Animal Industry of the Department of Agriculture for filing therein. He will likewise make a daily report on blank form (*M. I. 2*) of all certificates issued on that date and fill out said blank with all the information required thereon.

7. Whenever the inspection of any salted pork or bacon is requested by an exporter or shipper at any other place than where packed, the packages containing such meats are to be opened and closed at the expense of the exporter, and said packages must be branded or stenciled in the same manner and contain the same information as prescribed in the case of inspection for a packer.

J. M. RUSK, *Secretary*.

[PUBLIC—No. 247.]

AN ACT providing for an inspection of meats for exportation, prohibiting the importation of adulterated articles of food or drink, and authorizing the President to make proclamation in certain cases, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture may cause to be made a careful inspection of salted pork and bacon intended for exportation, with a view to determining whether the same is wholesome, sound, and fit for human food, whenever the laws, regulations, or orders of the Government of any foreign country to which such pork or bacon is to be exported shall require inspection thereof relating to the importation thereof into such country, and also whenever any buyer, seller, or exporter of such meats intended for exportation shall request the inspection thereof.

Such inspection shall be made at the place where such meats are packed or boxed, and each package of such meats so inspected shall bear the marks, stamps, or other device for identification provided for in the last clause of this section: *Provided*, That an inspection of such meats may also be made at the place of exportation if an inspection has not been made at the place of packing, or if, in the opinion of the Secretary of Agriculture, a re-inspection becomes necessary. One copy of any certificate issued by any such inspector shall be filed in the Department of Agriculture; another copy shall be attached to the invoice of each separate shipment of such meat, and a third copy shall be delivered to the consignor or shipper of meat as evidence that packages of salted pork and bacon have been inspected in accordance with the provisions of this act and found to be wholesome, sound, and fit for human food; and for the identification of the same such marks, stamps, or other devices as the Secretary of Agriculture may by regulation prescribe shall be affixed to each of such packages.

Any person who shall forge, counterfeit, or knowingly and wrongfully alter, deface, or destroy any of the marks, stamps, or other devices provided for in this

section on any package of any such meats, or who shall forge, counterfeit, or knowingly and wrongfully alter, deface, or destroy any certificate in reference to meats provided for in this section, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding one thousand dollars or imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

SEC. 2. That it shall be unlawful to import into the United States any adulterated or unwholesome food or drug or any vinous, spirituous or malt liquors, adulterated or mixed with any poisonous or noxious chemical, drug or other ingredient injurious to health. Any person who shall knowingly import into the United States any such adulterated food or drug, or drink, knowing or having reasons to believe the same to be adulterated, being the owner or the agent of the owner, or the consignor or consignee of the owner, or in privacy with them, assisting in such unlawful act, shall be deemed guilty of a misdemeanor, and liable to prosecution therefor in the district court of the United States for the district into which such property is imported; and, on conviction, such person shall be fined in a sum not exceeding one thousand dollars for each separate shipment, and may be imprisoned by the court for a term not exceeding one year, or both, at the discretion of the court.

SEC. 3. That any article designed for consumption as human food or drink, and any other article of the classes or description mentioned in this act, which shall be imported into the United States contrary to its provisions, shall be forfeited to the United States, and shall be proceeded against under the provisions of chapter eighteen of title thirteen of the Revised Statutes of the United States; and such imported property so declared forfeited may be destroyed or returned to the importer for exportation from the United States after the payment of all costs and expenses, under such regulations as the Secretary of the Treasury may prescribe; and the Secretary of the Treasury may cause such imported articles to be inspected or examined in order to ascertain whether the same have been so unlawfully imported.

SEC. 4. That whenever the President is satisfied that there is good reason to believe that any importation is being made, or is about to be made, into the United States, from any foreign country, of any article used for human food or drink that is adulterated to an extent dangerous to the health or welfare of the people of the United States, or any of them, he may issue his proclamation suspending the importation of such articles from such country for such period of time as he may think necessary to prevent such importation; and during such period it shall be unlawful to import into the United States from the countries designated in the proclamation of the President any of the articles importation of which is so suspended.

SEC. 5. That whenever the President shall be satisfied that unjust discriminations are made by or under the authority of any foreign state against the importation to or sale in such foreign state of any product of the United States, he may direct that such products of such foreign state so discriminating against any product of the United States as he may deem proper shall be excluded from importation to the United States; and in such case he shall make proclamation of his direction in the premises, and therein name the time when such direction against importation shall take effect, and after such date the importation of the articles named in such proclamation shall be unlawful. The President may at any time revoke, modify, terminate, or renew any such direction as, in his opinion, the public interest may require.

SEC. 6. That the importation of neat cattle, sheep, and other ruminants, and swine, which are diseased or infected with any disease, or which shall have been exposed to such infection within sixty days next before their exportation, is hereby prohibited; and any person who shall knowingly violate the foregoing provision shall be deemed guilty of a misdemeanor, and shall, on conviction, be punished by a fine not exceeding five thousand dollars, or by imprisonment not exceeding three years, and any vessel or vehicle used in such unlawful importation with the knowledge of the master or owner of said vessel or vehicle that such importation is diseased or has been exposed to infection as herein described, shall be forfeited to the United States.

SEC. 7. That the Secretary of Agriculture be, and is hereby, authorized, at the expense of the owner, to place and retain in quarantine all neat cattle, sheep, and other ruminants, and all swine, imported into the United States, at such ports as he may designate for such purposes, and under such conditions as he may by regulation prescribe, respectively, for the several classes of animals above described; and for this purpose he may have and maintain possession of all lands, buildings, tools, fixtures, and appurtenances now in use for the quarantine of neat cattle,

and hereafter purchase, construct, or rent as may be necessary, and he may appoint veterinary surgeons, inspectors, officers, and employees by him deemed necessary to maintain such quarantine, and provide for the execution of the other provisions of this act.

SEC. 8. That the importation of all animals described in this act into any port in the United States, except such as may be designated by the Secretary of Agriculture, with the approval of the Secretary of the Treasury, as quarantine stations, is hereby prohibited; and the Secretary of Agriculture may cause to be slaughtered such of the animals named in this act as may be, under regulations prescribed by him, adjudged to be infected with any contagious disease, or to have been exposed to infection so as to be dangerous to other animals; and that the value of animals so slaughtered as being so exposed to infection but not infected may be ascertained by the agreement of the Secretary of Agriculture and owners thereof, if practicable; otherwise, by the appraisal by two persons familiar with the character and value of such property, to be appointed by the Secretary of Agriculture, whose decision, if they agree, shall be final; otherwise, the Secretary of Agriculture shall decide between them, and his decision shall be final; and the amount of the value thus ascertained shall be paid to the owner thereof out of money in the Treasury appropriated for the use of the Bureau of Animal Industry; but no payment shall be made for any animal imported in violation of the provisions of this act. If any animals subject to quarantine according to the provisions of this act are brought into any port of the United States where no quarantine station is established the collector of such port shall require the same to be conveyed by the vessel on which they are imported or are found to the nearest quarantine station, at the expense of the owner.

SEC. 9. That whenever, in the opinion of the President, it shall be necessary for the protection of animals in the United States against infectious or contagious diseases, he may, by proclamation, suspend the importation of all or any class of animals for a limited time, and may change, modify, revoke, or renew such proclamation, as the public good may require; and during the time of such suspension the importation of any such animals shall be unlawful.

SEC. 10. That the Secretary of Agriculture shall cause careful inspection to be made by a suitable officer of all imported animals described in this act, to ascertain whether such animals are infected with contagious diseases or have been exposed to infection so as to be dangerous to other animals, which shall then either be placed in quarantine or dealt with according to the regulations of the Secretary of Agriculture; and all food, litter, manure, clothing, utensils, and other appliances that have been so related to such animals on board ship as to be judged liable to convey infection shall be dealt with according to the regulations of the Secretary of Agriculture; and the Secretary of Agriculture may cause inspection to be made of all animals described in this act intended for exportation, and provide for the disinfection of all vessels engaged in the transportation thereof, and of all barges or other vessels used in the conveyance of such animals intended for export to the ocean steamer or other vessels, and of all head-ropes and other appliances used in such exportation, by such orders and regulations as he may prescribe; and if, upon such inspection, any such animals shall be adjudged, under the regulations of the Secretary of Agriculture, to be infected or to have been exposed to infection so as to be dangerous to other animals, they shall not be allowed to be placed upon any vessel for exportation; the expense of all the inspection and disinfection provided for in the section to be borne by the owner of the vessels on which such animals are exported.

Approved, August 30, 1890.

REGULATIONS FOR THE INSPECTION AND QUARANTINE OF NEAT CATTLE, SHEEP, AND OTHER RUMINANTS, AND SWINE IMPORTED INTO THE UNITED STATES.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., October 13, 1890.

In pursuance of sections 7, 8, and 10 of an act of Congress entitled "An act providing for the inspection of meats for exportation, and prohibiting the importation of adulterated articles of food or drink, and authorizing the President to make proclamation in certain cases, and for other purposes,"¹ approved August 30, 1890,

¹ For text of act, see p. 335.

the following regulations are hereby prescribed for the inspection and quarantine of neat cattle, sheep, and other ruminants, and swine imported into the United States.

1. With the approval of the Secretary of the Treasury, the following-named ports are hereby designated as quarantine stations, and all cattle, sheep, and other ruminants, and swine imported into the United States must be entered through said ports, viz: On the Atlantic seaboard, the ports of Boston, New York, and Baltimore, on the Pacific seaboard, San Diego; along the boundary between the United States and Mexico, Brownsville, Paso del Norte, Eagle Pass, Laredo, and Nogales; and along the border or boundary line between the United States and British Columbia and Canada, through the customs ports in the collection districts of Arcostook and Bangor, Me.; Vermont, Vt.; Buffalo Creek, Niagara, Cape Vincent, Champlain, and Oswegatchie, N. Y.; Detroit, Port Huron, and Superior, Mich.; Minnesota and Duluth, Minn.; Puget Sound, Wash.

2. The word "animals," when used in these regulations, refers to and includes all or any of the following kind: Neat cattle, sheep, and other ruminants, and swine. The words "contagious diseases," when used in these regulations, includes and applies to all or any of the following diseases: Anthrax in cattle, sheep, goats, or swine; contagious pleuro-pneumonia in cattle; tuberculosis in cattle; foot-and-mouth disease in cattle, sheep, goats, and swine; rinderpest in cattle and sheep; sheep-pox, foot-rot, and scab in sheep; hog cholera and swine plague in swine.

3. All cattle, sheep, and other ruminants imported into the United States from any part of the world except North and South America shall be accompanied with a certificate from the local authority of the district in which said animals have been for one year next preceding the date of shipment, stating that no contagious pleuro-pneumonia, foot-and-mouth disease, or rinderpest has existed in said district for the past year. And all swine imported into the United States from any part of the world except North, Central, and South America shall be accompanied with a similar certificate relating to the existence of foot-and-mouth disease. All such animals shall also be accompanied with an affidavit by the owner from whom the importer has purchased them, stating that said animals have been in the district where purchased for one year next preceding the date of sale, and that neither of the above-mentioned diseases has existed among them, or among any animals of the kind with which they have come in contact, for one year last past, and that no inoculation has been practiced among said animals for the past two years. Also by an affidavit from the importer or his agent supervising the shipment, stating that the animals have been shipped in clean and disinfected cars and vessels direct from the farm where purchased; that they have not passed through any district infected with contagious diseases affecting said kind of animals, and that they have not been exposed in any possible manner to the contagion of any of said contagious diseases.

4. The foregoing certificate and affidavits must accompany said animals and be presented to the collector of customs at the ports of entry, and by him be delivered to the inspector of the Bureau of Animal Industry stationed at said port, to allow them to be imported into the United States.

5. All neat cattle imported into the United States from any part of the world except North, Central, and South America shall be subject to a quarantine of ninety days, counting from date of arrival at the quarantine station. All sheep and other ruminants and swine from any part of the world except North, Central, and South America shall be subject to a quarantine of fifteen days, counting from date of arrival at the quarantine station.

6. Any person contemplating the importation of animals from any part of the world except North, Central, and South America must first obtain from the Secretary of Agriculture two permits, one stating the number and kind of animals to be imported, the port and probable date of shipment, which will entitle them to clearance papers on presentation to the American consul at said port of shipment; the other stating the port at which said animals are to be landed and quarantined and the approximate date of their arrival, and this will assure the reception of the number and kind specified therein at the port and quarantine station named, at the date prescribed for their arrival, or at any time during three weeks immediately following, after which the permit will be void. These permits shall in no case be available at any port other than the one mentioned therein. Permits must be in the name of the owner of or agent for any one lot of animals. When more persons than one own a lot of animals for which permits have been issued, a release from quarantine will be given each owner for the number and kind he may own, and this release will be a certificate of fulfillment of quarantine regulations. Permits will be issued to quarantine at such ports as the importer may elect, so far as facilities exist at such port, but in no case will permits for importation at

any port be granted in excess of the accommodations of the Government quarantine station at such port. Every importer shall, on the day of the shipment from a foreign port, telegraph to the Chief of the Bureau of Animal Industry the number (and kind of animals shipped, the vessel on which they are shipped, and the port at which they are to be landed. United States consuls at foreign ports are hereby notified to give clearance papers or certificates for importation of animals only upon presentation of permits as above provided, with dates of probable arrival and destination corresponding with said permits, and in no case for a number in excess of that mentioned therein.

7. All animals imported into the United States shall be carefully inspected by a veterinary inspector of the Bureau of Animal Industry, and all animals found to be free from disease and not to have been exposed to any contagious disease, except as provided in Regulation 5, shall be admitted into the United States. Whenever any animal is found to be affected with a contagious disease, or to have been exposed to such disease, said animal, and all animals that have been in contact or exposed to said animal, will be placed in quarantine, and the inspector quarantining the same shall report at once to the Chief of the Bureau of Animal Industry, who will direct whether or not said animals quarantined shall be appraised and slaughtered, as provided by section 8 of the act under which these regulations are made. All animals quarantined by reason of disease or exposure to disease shall not be admitted to the established quarantine grounds, but shall be quarantined elsewhere, at the expense of the importer, or be dealt with in such manner as the Chief of the Bureau of Animal Industry shall determine.

8. In case of imported animals proving to be infected, or to have been exposed to infection, such portions of the cargo of the vessel on which they have arrived as have been exposed to these animals or their emanations shall be subjected, under the direction of the inspector of the Bureau of Animal Industry, to disinfection in such manner as may be considered by said inspector necessary before it can be landed.

9. No litter, fodder, or other aliment, nor any ropes, straps, chains, girths, blankets, poles, buckets, or other things used for or about the animals, and no manure shall be landed, excepting under such regulations as the veterinary inspector shall provide.

10. On moving animals from the ocean steamer to the quarantine grounds, they shall not be unnecessarily passed over any highway, but must be placed on cars at the wharves or removed to the cars on a boat which is not used for conveying other animals. If such boat has carried animals within three months it must be first cleaned and then disinfected under the supervision of the inspector, and after the conveyance of the imported animals the boat must be disinfected in the same manner before it may be again used for the conveyance of animals. When passage upon or across the public highway is unavoidable in the transportation of animals from the place of landing to the quarantine grounds, it must be under such careful supervision and restrictions as the veterinary inspector may, in special cases, direct.

11. The banks and chutes used for loading and unloading imported animals shall be reserved for such cattle, or shall be cleansed and disinfected as above before being used for such imported cattle.

12. The railway cars used in the transportation of animals to the quarantine grounds shall either be cars reserved for this exclusive use, or box cars not otherwise employed in the transportation of animals or their fresh products, and after each journey with animals to the quarantine grounds they shall be disinfected by thorough cleansing and disinfection under the direction of the veterinary inspector.

13. While animals are arriving at the quarantine stations or leaving them, all quarantined stock in the yards adjoining the alleyways through which they must pass shall be rigidly confined to their sheds. Animals arriving by the same ship may be quarantined together in one yard and shed, but those coming on different ships shall in all cases be placed in separate yards.

14. The gates of all yards of quarantine stations shall be kept locked, except when cattle are entering or leaving quarantine.

15. The attendants on animals in particular yards are forbidden to enter other yards and buildings, except such as are occupied by stock of the same shipment with those under their special care. No dogs, cats, or other animals, except those necessarily present, shall be allowed in the quarantine grounds.

16. The allotment of yards shall be under the direction of the veterinary inspector of the port, who shall keep a register of the animals entered, with description, name of owner, name of vessel in which imported, date of arrival and release, and other important particulars.

17. The veterinary inspector shall see that water is regularly furnished to the stock, and the manure removed daily, and that the prescribed rules of the station are enforced.

18. Food and attendance must be provided by the owners of the stock quarantined. Employees of such owners shall keep the sheds and yards clean, to the satisfaction of the veterinary inspector.

19. "Smoking" is strictly forbidden within any quarantine inclosure.

20. No visitors shall be admitted to the quarantine station without special written permission from the veterinary inspector. Butchers, cattle dealers, and their employees are especially excluded.

21. No public sale shall be allowed within the quarantine grounds.

22. The inspector shall, in his daily rounds, as far as possible, take the temperature of each animal, commencing with the herds that have been longest in quarantine and ending with the most recent arrivals, and shall record such temperatures on lists kept for the purpose. In passing from one herd to another he shall invariably wash his thermometer and hands in a weak solution (1 to 100) of carbolic acid.

23. In case of the appearance of any disease that is diagnosed to be of a contagious nature, the veterinary inspector shall notify the Chief of the Bureau of Animal Industry, who shall visit the station personally or send a veterinary inspector, and on the confirmation of the diagnosis the herd shall be disposed of according to the gravity of the affection.

24. The yard and shed in which such disease shall have appeared shall be subject to a thorough disinfection. Litter and fodder shall be burned. Sheds, utensils, and other appliances shall be disinfected as the veterinary inspector may direct. The yard, fence, and manure box shall be freely sprinkled with a strong solution of chloride of lime. The flooring of the shed shall be lifted and the whole shall be left open to the air and unoccupied for three months.

25. In the case of the appearance of any contagious disease the infected herd shall be rigidly confined to its shed, where disinfectants shall be freely used, and the attendants shall be forbidden all intercourse with the attendants in other yards and with persons outside the quarantine grounds.

J. M. RUSK, *Secretary*.

[The designation of the ports named in the foregoing regulations as quarantine stations was approved by the Secretary of the Treasury on the 16th day of October, 1890, as provided by section 8 of the act of Congress approved August 30, 1890, providing for inspection of meats and animals.]

ORDER AND REGULATIONS FOR THE INSPECTION OF CATTLE AND SHEEP FOR EXPORT.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., October 20, 1890.

The following order and regulations are hereby made for the inspection of neat cattle and sheep for export from the United States to Great Britain and Ireland and the Continent of Europe, by virtue of the authority conferred upon me by section 10 of the act of Congress approved August 30, 1890,¹ entitled "An act providing for the inspection of meats for exportation, prohibiting the importation of adulterated articles of food or drink, and authorizing the President to make proclamation in certain cases, and for other purposes;"

1. The Chief of the Bureau of Animal Industry is hereby directed to cause careful veterinary inspection to be made of all neat cattle and sheep to be exported from the United States to Great Britain and Ireland and the Continent of Europe.

2. This inspection will be made at any of the following-named stock yards: Kansas City, Mo.; Chicago, Ill.; Buffalo, N. Y.; Pittsburg, Pa.; and at the following ports of export, viz, Boston and Charlestown, Mass.; New York, N. Y.; Philadelphia, Pa.; Baltimore, Md., and Norfolk and Newport News, Va. All cattle shipped from any of the aforesaid yards must be tagged before being shipped to the ports of export. Cattle arriving at ports of export from other parts of the United States will be tagged at said ports.

3. After inspection at the aforesaid stock yards, all cattle found free of disease and shown not to have been exposed to the contagion of any contagious disease

¹ For text of act see D. 335.

will be tagged under the direction of the veterinary inspector in charge of the yards. After tagging, the cattle will be loaded into cleaned and disinfected cars and shipped through from said yards in said cars to the port of export.

4. All animals will be re-inspected at the port of export. All railroad companies will be required to furnish for the transportation of cattle and sheep for export clean and disinfected cars, and the various stock yards located at the ports of export shall keep separate clean and disinfected yards for the reception of export animals only.

5. Shippers will notify the veterinary inspector in charge of yards of intended shipments of cattle, and will give to the said inspector, when possible, the name of the locality from which said animals have been brought, and the name of the feeder of said animals, and such further and other information as may be practicable for proper identification of the place from which said animals have come.

6. The inspector, after passing said cattle, and tagging the same, will notify the veterinary inspector in charge of the port of export of the inspection of said animals, giving him the tag numbers and the number and designation of the cars in which said animals are shipped.

7. Export animals, whenever possible, shall be unloaded at the port of export from the cars in which they have been transported directly at the wharves from which they are to be shipped. They shall not be unnecessarily passed over any highway or removed to cars or boats which are used for conveying other animals. Boats transporting said animals to the ocean steamer must be first cleansed and disinfected under the supervision of the veterinary inspector of the port, and the ocean steamer must, before receiving said animals, be thoroughly cleaned or disinfected in accordance with the directions of said inspector. When passage upon or across the public highway is unavoidable in the transportation of animals from the cars to the boat, it must be under such careful supervision and restrictions as the veterinary inspector may, in special cases, direct.

8. Any cattle or sheep that are offered for shipment to Great Britain or Ireland, or the Continent of Europe, which have not been inspected and transported in accordance with this order and regulations, will not be allowed to be placed upon any vessel for exportation, as they will be deemed, under the law, to have been exposed to infection so as to be dangerous to other animals.

9. The supervision of the movement of cattle from cars and yards to the ocean steamer at the ports of export will be in charge of the veterinary inspector of the port. No ocean steamer will be allowed to receive more cattle or sheep than it can comfortably carry. Over-crowding will not be permitted.

10. The veterinary inspector at the port of export will notify the collector of the port of the various shipments of cattle or sheep that are entitled to clearance papers, and certificates of the inspection of said animals will be given to the consignors for transmission with the bills of lading.

J. M. RUSK, *Secretary*.

REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 5, 1891.

To the managers and agents of railroad and transportation companies of the United States, stockmen, and others:

In accordance with section 7 of the act of Congress approved May 29, 1884,¹ entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," and of the act of Congress approved July 14, 1890, making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1891, you are hereby notified that a contagious and infectious disease known as splenic, or Southern, fever exists among cattle in the following-described area of the United States:²

All that country lying east and south of a line commencing at the southeast corner of the Territory of New Mexico, thence running northerly along the eastern boundary of New Mexico to the southwestern corner of the county of Cochran, State of Texas, thence easterly along the southern boundaries of the counties of

¹ See Report of Bureau for 1884, p. 473.

² See statement of April 4, 1891, p. 310.

Cochran, Hockley, Lubbock, Crosby, Dickens, and King to the one hundredth meridian of longitude; thence northerly along said one hundredth meridian to the southern boundary of the State of Kansas; thence easterly along the southern boundary of the State of Kansas to the northeast corner of the Indian Territory; thence southerly along the eastern boundary of the Indian Territory to the southwestern corner of the State of Missouri; thence easterly along the southern boundaries of the State of Missouri and the State of Kentucky and the State of Virginia to a point where said boundary is intersected by the Blue Ridge Mountains; thence in a northeasterly direction, following said Blue Ridge Mountains, to the southwestern corner of the county of Madison, State of Virginia; thence easterly along the southern boundaries of the counties of Madison, Culpeper, and Stafford, thence northerly along the eastern boundary of Stafford County to the Potomac River; thence, following the Potomac River, southerly to the Chesapeake Bay; thence easterly along the southern boundary of Maryland to the Atlantic Ocean.

From the 15th day of February to the 1st day of December, 1891, no cattle are to be transported from said area to any portion of the United States north or west of the above-described line, except in accordance with the following regulations:

First. When any cattle in course of transportation from said area are unloaded north or west of this line to be fed or watered, the places where said cattle are to be so fed or watered shall be set apart, and no other cattle shall be admitted thereto.

Second. On unloading said cattle at their points of destination pens shall be set apart to receive them, and no other cattle shall be admitted to said pens; and the regulations relating to the movement of Texas cattle prescribed by the cattle sanitary officers of the State where unloaded shall be carefully observed. The cars that have carried said stock shall be cleansed and disinfected before they are again used to transport, store, or shelter animals or merchandise.

Third. Whenever any cattle that have come from said area shall be reshipped from any of the points at which they have been unloaded to other points of destination, the car carrying said animals shall bear a placard stating that said car contains Southern cattle, and each of the waybills of said shipment shall have a note upon its face with a similar statement. At whatever point these cattle are unloaded they shall be placed in separate pens, to which no other cattle shall be admitted.

Fourth. The cars used to transport such animals and the pens in which they are fed and watered, and the pens set apart for their reception at points of destination, shall be disinfected in the following manner:

- (a) Remove all litter and manure. This litter and manure may be disinfected by mixing it with lime, diluted sulphuric acid, or, if not disinfected, it may be stored where no cattle can come in contact with it until after December 1.
- (b) Wash the cars and the feeding and watering troughs with water until clean.
- (c) Saturate the walls and floors of the cars and the fencing, troughs, and chutes of the pens with a solution made by dissolving 4 ounces of chloride of lime to each gallon of water. Or disinfect the cars with a jet of steam under a pressure of not less than 50 pounds to the square inch.

The losses resulting yearly to the owners of susceptible cattle, both in the interstate and export trade, by the contraction of this disease from exposure in unclean and infected cars and pens and by means of the manure carried in unclean cars from place to place, and the threatened prohibition of our export trade by foreign governments because of the occurrence of this disease, have become a matter of grave and serious concern to the cattle industry of the United States. It is absolutely essential, therefore, that this cattle industry should be protected as far as possible by separating the dangerous cattle and by the adoption of efficient methods of disinfection.

A rigid compliance with the above regulations will insure comparative safety to Northern cattle and render it unnecessary to adopt a more stringent regulation, such as the absolute prohibition of the movement of Southern cattle except for slaughter during the time of year that this disease is fatal.

Inspectors will be instructed to see that disinfection is properly done, and it is hoped that transportation companies will promptly put in operation the above methods.

Very respectfully,

J. M. RUSK, *Secretary.*

REGULATIONS FOR THE INSPECTION OF LIVE STOCK AND THEIR PRODUCTS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., March 25, 1891.

The following rules and regulations, being additional to the rules and regulations¹ heretofore made under the act of Congress approved August 30, 1890,² are hereby prescribed for the inspection of live cattle, hogs, and their carcasses, by virtue of the authority conferred upon the Secretary of Agriculture under the provisions of the act of Congress approved March 3, 1891 [appended hereto], entitled "An act to provide for the inspection of live cattle, hogs, and the carcasses and products thereof which are the subjects of interstate commerce, and for other purposes."

EXPORT CATTLE INSPECTION.

1. The order and regulations providing for the inspection of export cattle and sheep, made October 20, 1890,³ under the provisions of section 10 of the act of Congress approved August 30, 1890, are hereby continued in full force and effect, the same as if made under the provisions of the act of March 3, 1891, and all exporters, to secure clearance for their shipments of cattle, must comply strictly with the said regulations.

MEAT INSPECTION.

2. The proprietors of slaughterhouses, canning, salting, packing, or rendering establishments, engaged in the slaughter of cattle, sheep, or swine, the carcasses or products of which are to become subjects of interstate or foreign commerce, will make application to the Secretary of Agriculture for inspection of said animals and their products.

3. The said application must be in writing, addressed to the Secretary of Agriculture, Washington, D. C., and shall state the location and address of the slaughterhouse or other establishment, the kind of animals slaughtered, the estimated number of animals slaughtered per week, and the character and quantity of the products to go into interstate or foreign commerce from said establishment; and the said applicant in his application shall agree to conform strictly with all regulations or orders that may be made by the Secretary of Agriculture for carrying on the work of inspection at such establishment.

4. The Secretary of Agriculture, upon receipt of said application and after consideration thereof, will give said establishment an official number, by which all its inspected products will thereafter be known, and this number will be used both by the inspectors of the Department of Agriculture and by the owners of said establishment to mark the products of the establishment, as hereinafter prescribed.

5. The Secretary of Agriculture will appoint and designate a veterinary inspector to take charge of the examination and inspection of animals and their products for each establishment which has been officially numbered, as prescribed by rule 3, and will detail to such inspector such assistants or other employees as may be necessary to properly carry on the work of inspection at said establishment. The inspector appointed and all employees under his direction shall have full and free access at all times to all parts of the building or buildings used in the slaughter of live animals and the conversion of their carcasses into food products.

6. The veterinary inspector in charge of said establishment will carefully inspect all animals in the pens of said establishment about to be slaughtered, and no animal shall be allowed to pass to the slaughtering room until it has been so inspected. Whenever any animal is found on said inspection to be diseased, said animal shall thereupon be condemned by the inspector, and the owner of the same shall at once remove it from the premises and dispose of it in such manner as may be provided by the laws of the State in which said animal is located.

7. The veterinary inspector or his assistant shall carefully inspect at time of slaughter all animals slaughtered at said establishment and make a post-mortem report of the same to the Department. Should the carcass of any animal, on said post-mortem examination, be found to be diseased and unfit for human food, the said carcass shall at once be removed from said establishment under the supervision of the inspector and be disposed of in the manner provided by the laws of the State where slaughtered. Any owner of any establishment in which inspections are being made under the provisions of the act of March 3, 1891, who shall willfully cause or permit any animal which, upon inspection, has been found to

¹ See p. 334.

² See p. 335.

³ See p. 340.

be diseased to remain on said premises beyond the time allowed by the inspector in charge for its removal shall forfeit his right to inspection, and said establishment will, for such time as the Secretary may direct, be refused certificates of inspection upon its products.

8. The carcasses of cattle which leave said establishment as dressed beef will be stamped by said inspector with a numbered stamp issued by the Department of Agriculture, and a record of the same will be sent to the Department at Washington.

9. Each and every article of food products made from the carcasses of animals inspected will be labeled or marked in such manner as the owner of said establishment may direct. Said label, however, must bear the official number of the establishment from which said product came and also contain a statement that the same has been inspected under the provisions of the act of March 3, 1891.

A copy of said label must be filed at the Department of Agriculture, Washington, D. C., and after filing said label will become the mark of identification showing that the products to which it has been attached have been inspected, as provided by these rules and regulations; and any person who shall forge, counterfeit, alter, or deface said label will be prosecuted under the penalty clause of section 4 of the act of March 3, 1891.

Each and every package to be shipped from said establishment to any foreign country must have printed or stenciled on the side or on the top, by the packer or exporter, the following:

FOR EXPORT.

- (a) Official number of establishment.
- (b) Location of factory.
- (c) Number of pieces or pounds.
- (d) Trademark.

In case said package is for transportation to some other State or Territory or to the District of Columbia, in place of the words "For export" the words "Interstate trade" shall be substituted.

The letters and figures in the above print shall be of the following dimensions: The letters in the words "For export" or the words "Interstate trade" shall not be less than three-fourths of an inch in length and the other letters and figures not less than one-half inch in length. The letters and figures affixed to said packages shall be legible and shall be in such proportion and of such color as the inspector of the Department of Agriculture may designate.

10. The inspector of the Department of Agriculture in charge of said establishment, being satisfied that the articles in said packages came from animals inspected by him and that they are wholesome, sound, and fit for human food, shall affix to the top of said packages meat-inspection stamps, to be furnished by the Department of Agriculture, said stamps bearing serial numbers, and the inspector will write on said stamps the date of inspection.

The stamp must be securely affixed by paste and tacks in such a way as to be easily read when the package is standing on its bottom. Not less than five tacks shall be driven through each stamp, one at each corner and one in the middle of the stamp.

The stamp having been affixed, it must be immediately canceled. For this purpose the inspector will use a stencil plate of brass or copper, in which will be cut five parallel waved lines long enough to extend beyond each side of the stamp on the wood of the package. At the top of said stencil will be cut the name of the inspector and at the bottom of said stencil will be cut the district in which inspection is made. The imprinting from this plate must be with blacking or other durable material over and across the stamp, and in such a manner as not to deface the reading matter on the stamp; that is, so as not to daub and make it illegible. The stamp having been affixed and canceled, it must immediately be covered with a coating of transparent varnish or other substance. Orders for stamps must be made by the inspector on the Chief of the Bureau of Animal Industry.

11. Whenever any package of meat products bearing the stamp of inspection shall have been opened and its contents removed for sale the stamp on said package must be effaced and obliterated from the package.

12. Reports of the work of inspection carried on in every establishment will be forwarded to the Department by the inspector in charge on such blank forms and in such manner as will be specified in "instructions to inspectors of slaughtering establishments."

SWINE.

13. The inspection of swine for export or interstate trade will be conducted in the same manner as prescribed in the foregoing rules, with the addition, however, that a microscopic examination for trichina will be required for all swine products.

14. When the slaughtered hog is passed into the cooling room of said establishment the veterinary inspector in charge or his assistants will take from each hog two samples of muscle, one from the "pillar of the diaphragm" and the other from another part of the body, and said samples will be put in a self-locking tin box and a numbered tag will be placed upon the hog from which said samples have been taken and a duplicate number of said tag will be placed in the box with said samples. The boxes containing the samples from the hogs in the cooling room so tagged will be taken to the microscopist for such establishment, who shall thereupon make a microscopic examination of each box containing samples and shall furnish a written report to the inspector in charge of the cooling room, giving the result of said microscopic examination, together with the numbers of the hogs from which samples have been examined.

15. All hogs reported by the microscopist to the inspector in charge of the cooling room to be affected with trichina will at once be removed from said cooling room of said establishment under the supervision of said inspector or one of his deputies and be disposed of by the owner in such manner as may be required by the laws of the State where said factory is situated.

16. The inspector in charge of the slaughtering or other establishment will issue a certificate of inspection for all carcasses of animals or the food products thereof which are to be exported into foreign countries, which certificate will cite the number of the factory, the name of the owner or owners operating the same, the date of inspection, and the name of the consignee and country to which said articles are to be exported. Said certificate will also contain the numbers of the stamps attached to the articles to be exported. One certificate only will be issued for each consignment. The certificates will be issued in serial numbers and in triplicate form. One copy thereof will be delivered to the consignor of such shipment, one copy will be attached to the invoice or shipping bill to accompany the same and be delivered by the transportation companies to the chief officer of the vessel upon which said consignment is to be transported, and the third copy will be forwarded to the Department of Agriculture for filing therein.

J. M. RUSK, *Secretary*.

AN ACT to provide for the inspection of live cattle, hogs, and the carcasses and products thereof which are the subjects of interstate commerce, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture shall cause to be made a careful inspection of all cattle intended for export to foreign countries from the United States, at such times and places, and in such manner, as he may think proper, with a view to ascertain whether such cattle are free from disease; and for this purpose he may appoint inspectors, who shall be authorized to give an official certificate clearly stating the condition in which such animals are found, and no clearance shall be given to any vessel having on board cattle for exportation to a foreign country unless the owner or shipper of such cattle has a certificate from the inspector herein authorized to be appointed, stating that said cattle are sound and free from disease.

SEC. 2. That the Secretary of Agriculture shall also cause to be made a careful inspection of all live cattle the meat of which is intended for exportation to any foreign country, at such times and places, and in such manner, as he may think proper, with a view to ascertain whether said cattle are free from disease and their meat sound and wholesome, and may appoint inspectors, who shall be authorized to give an official certificate clearly stating the condition in which such cattle and meat are found and no clearance shall be given to any vessel having on board any fresh beef for exportation to and sale in a foreign country from any port of the United States until the owner or shipper shall obtain from an inspector appointed under the provisions of this act such certificate.

SEC. 3. The Secretary of Agriculture shall cause to be inspected, prior to their slaughter, all cattle, sheep, and hogs which are subjects of interstate commerce and which are about to be slaughtered at slaughterhouses, canning, salting, packing, or rendering establishments in any State or Territory, the carcasses or products of which are to be transported and sold for human consumption in any other State or Territory or the District of Columbia, and in addition to the aforesaid inspection, there may be made in all cases where the Secretary of Agriculture may deem necessary or expedient, under the rules and regulations to be by him prescribed, a post-mortem examination of the carcasses of all cattle, sheep, and hogs about to be prepared for human consumption at any slaughterhouse, canning, salting, packing, or rendering establishment in any State or Territory, or the District of Columbia, which are the subjects of interstate commerce.

SEC. 4. That said examination shall be made in the manner provided by rules and regulations to be prescribed by the Secretary of Agriculture, and after said examination the carcasses and products of all cattle, sheep, and swine found to be free of disease, and wholesome, sound, and fit for human food, shall be marked, stamped, or labeled for identification as may be provided by said rules and regulations of the Secretary of Agriculture.

Any person who shall forge, counterfeit, or knowingly and wrongfully alter, deface, or destroy any of the marks, stamps, or other devices provided for in the regulations of the Secretary of Agriculture, of any such carcasses or their products, or who shall forge, counterfeit, or knowingly and wrongfully alter, deface, or destroy any certificate provided for in said regulations, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding one thousand dollars, or imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

SEC. 5. That it shall be unlawful for any person to transport from one State or Territory or the District of Columbia into any other State or Territory or the District of Columbia, or for any person to deliver to another for transportation from one State or Territory or the District of Columbia into another State or Territory or the District of Columbia the carcasses of any cattle, sheep, or swine, or the food products thereof, which have been examined in accordance with the provisions of sections three and four of this act, and which on said examination have been declared by the inspector making the same to be unsound or diseased. Any person violating the provisions of this section shall be deemed guilty of a misdemeanor and punished for each offense as provided in section four of this act.

SEC. 6. That the inspectors provided for in sections one and two of this act shall be authorized to give official certificates of the sound and wholesome condition of the cattle, sheep, and swine, their carcasses and products described in sections three and four of this act, and one copy of every certificate granted under the provisions of this act shall be filed in the Department of Agriculture, another copy shall be delivered to the owner or shipper, and when the cattle, sheep, and swine, or their carcasses and products are sent abroad, a third copy shall be delivered to the chief officer of the vessel on which the shipment shall be made.

SEC. 7. That none of the provisions of this act shall be so construed as to apply to any cattle, sheep, or swine slaughtered by any farmer upon his farm, which may be transported from one State or Territory or the District of Columbia into another State or Territory or the District of Columbia: *Provided, however,* That if the carcasses of such cattle, sheep, or swine go to any packing or canning establishment and are intended for transportation to any other State or Territory or the District of Columbia as hereinbefore provided, they shall there be subject to the post-mortem examination provided for in sections three and four of this act.

Approved, March 3, 1891.

CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., April 4, 1891.

Notice is hereby given that the regulations made February 5, 1891,¹ for the transportation of cattle from the area designated by said regulations as infected with the contagious disease known as splenic fever, applies to the movement of cattle from said area north for immediate slaughter. The transportation of cattle from said area for feeding or for any other purpose except immediate slaughter is prohibited by the act of Congress of May 29, 1884.²

J. M. RUSK, *Secretary.*

CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., April 23, 1891.

Notice is hereby given that cattle which have been at least ninety days in the area of country hereinafter described may be moved from said area by rail into the States of Colorado, Wyoming, and Montana, for grazing purposes, in accord-

¹ See text, on p. 311.

² See Report of Bureau for 1884, p. 473.

ance with the regulations made by said States for the admission of Southern cattle thereto. Provided:

1. That cattle from said area shall go into said States only for slaughter or grazing, and shall on no account be shipped from said States into any other State or Territory of the United States before the 1st day of December, 1891.

2. That such cattle shall not be allowed in pens or on trails or ranges that are to be occupied or crossed by cattle going to the Eastern markets before December 1, 1891, and that these two classes of cattle shall not be allowed to come in contact.

3. That all cars which have carried cattle from said area shall, upon unloading, at once be cleaned and disinfected in the manner provided by the regulations of this Department of February 5, 1891.¹

4. That the State authorities of the States of Colorado, Wyoming, and Montana agree to enforce these provisions.

The area from which cattle may go into the States of Colorado, Wyoming, and Montana by rail for grazing, as above provided, is as follows: All that area included within the following boundary lines, viz, commencing at the southeast corner of the Territory of New Mexico; thence running northerly along the eastern boundary of New Mexico to the southwestern corner of the county of Cochran, State of Texas; thence easterly along the southern boundaries of the counties of Cochran, Hockley, Lubbock, Crosby, Dickens, and King to the one hundredth meridian; thence northerly along said one hundredth meridian to the Red River, where it crosses the eastern boundary of the county of Childress; thence following said Red River to the northwest corner of the county of Wichita; thence along the eastern boundaries of the counties of Wilbarger, Baylor, Throckmorton, and Shackelford; thence west along the southern boundary of Shackelford County; thence south along the eastern boundaries of Taylor, Runnels, Concho, Menard, and Kimble counties; thence west along the south lines of Kimble, Sutton, and Crockett counties; thence south along the east line of Pecos County to the Rio Grande River; thence along the Rio Grande River to the one hundredth meridian, and thence northerly along said meridian to the point of beginning.

J. M. RUSK, *Secretary*.

CONTAGIOUS DISEASES OF SHEEP AND SWINE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., May 19, 1891.

Whereas, under the act of Congress approved August 30, 1890,² it has been provided by the Department of Agriculture, in order to protect the sheep and swine of the United States from contagious diseases now existing in foreign countries, that all sheep and swine imported from Great Britain and the Continent of Europe must be held in quarantine for a period of not less than fifteen days; and,

Whereas the Dominion of Canada makes no requirement of quarantine for sheep and swine imported into that country from Great Britain or the Continent of Europe; and,

Whereas to permit importations of these animals from Canada into the United States without quarantine would be dangerous to the stock interests of the United States, owing to the failure on the part of the Canadian authorities to enforce this measure of protection, and would enable importers to evade the quarantine at United States ports: Therefore, it is

Ordered, That all sheep or swine to be imported from Canada into the United States are hereby made subject to the regulations of the Department of Agriculture of date October 13, 1890,² and the exception contained in the third and sixth regulations of said date, as applicable to Canadian sheep and swine, is hereby rescinded; and all animals named in said regulations, except cattle imported from Canada, are subject to the same conditions and requirements as if they were imported into the United States from Great Britain or the Continent of Europe.

J. M. RUSK, *Secretary*.

¹ See p. 341.

² See p. 337.

REGULATIONS FOR THE SAFE TRANSPORT OF CATTLE FROM THE UNITED STATES TO FOREIGN COUNTRIES.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 6, 1891.

Pursuant to the authority invested in the Secretary of Agriculture by virtue of an act of Congress approved March 3, 1891 [hereto appended], entitled "An act to provide for the safe transport and humane treatment of export cattle from the United States to foreign countries, and for other purposes," the following regulations are hereby prescribed for vessels engaged in the transportation of cattle from the United States to foreign countries:

1. The owners, agents, or master of any vessel desiring to transport cattle from any port of the United States will make application to the Secretary of Agriculture at Washington, D. C., for a certificate of register. Said application shall be made upon a blank form furnished by the Department of Agriculture to be filed out by the applicant, and on receipt of the same the Secretary of Agriculture will direct the veterinary inspector in charge of the port from which said vessel is to clear to examine said vessel, and if the same has complied with the regulations hereinafter prescribed a certificate of registry will be issued, good for the term of one year, which will entitle said vessel to engage in the trade of carrying export cattle, and will state the number of cattle which said vessel may transport. Provided, however, that any certificate of registry issued shall be subject at any time to cancellation upon the violation of any of these regulations by said vessel, and that the veterinary inspector of the port may from time to time make such changes in the fittings of said vessel as in his judgment may seem necessary.

SPACE.

2. Cattle carried on the upper or spar deck must be allowed a space of 2 feet 6 inches in width by 8 feet in depth per head. No more than four head of cattle will be allowed in each pen. Cattle loaded between decks must be allowed a space of 2 feet 8 inches in width by 8 feet in depth, no more than four head being allowed in each pen, except at the end of a row, where five may be allowed together.

3. Vessels will be allowed to carry three deck loads of cattle; but where it is desired to carry cattle on the lower or steerage deck special permission must be obtained from the inspector, which will only be granted in cases where said deck is provided with sufficient ventilation, as hereinafter prescribed.

UPPER-DECK FITTINGS.

4. *Stanchions, wooden.*—Stanchions must be of good, sound timber, 4 by 6 inches, placed at proper distances from centers, against ship's rail and inside stanchions, in their proper place directly in line with out-board stanchions, to be set up so that the 6-inch way of the stanchion shall be set fore and aft. A proper tenon shall be cut on the head of same to receive the thwart-ship beam; the tenon not to be less than 3 inches in length and the shoulder not less than 2½ inches on each side of the stanchion, thus leaving the tenon 1½ inches thick. A piece of 2 by 3 inches or 2-inch plank shall be fastened to outside of stanchion and run up to underneath rail to chock stanchion down and prevent lifting when beam is sprung to crown of deck. Open-rail ships shall be blocked out on backs of stanchions fair with the outside of rails, to receive the outside of planking. Where upper-deck fittings are not permanent, the heels of outside stanchions shall be secured by a bracing of 2 by 3 inch sound lumber from the back of each stanchion to shear-streak or waterway, the heels of inside stanchions being properly braced from and to each other. Bulwark stanchions must also be extra stanchioned by raking shores running diagonally from the top of the stanchions to the deck.

Stanchions, iron.—These may be used in place of wooden stanchions, and should be not less than 2 inches in diameter, set, in iron sockets above and below, and fastened with nut and bolt.

Hook bolts or clamps.—Hook bolts or clamps must be made of five-eighths inch wrought iron, with hook on out-board end and thread and nut on in-board end, to pass over and under rail and through out-board stanchion, and set up on the inside of same with a nut. These bolts may be double or single. If double then no thread or nut is necessary, but the stanchion will lie shipped through it, thus double hooking the rails. This will be found very useful where funnels or other deck fitting come in the way of beams passing from side to side of ship.

Beams.—Beams must be of good, sound lumber 3 by 6 inch, to run clear across the ship beam where practicable. Should any house or deck fittings be in the way, then butt up closely to same. These beams shall have a 1½ by 4 inch mortise cut in to receive the tenon of each and every stanchion, and to take the same crown as deck of ship by springing down to shoulder of outside stanchions, and to be properly pinned or nailed to tenon and wedged tightly afterwards. The mortises shall be cut not less than 6 inches from outside ends of beams and a piece nailed on outside of same, and trimmed off fair with beam ends to prevent splitting.

Diagonal braces from stanchions to beams.—Diagonal braces shall be fastened on each stanchion on both sides of same, running up to top side of beam and properly secured by well nailing to both stanchion and beam.

Headboards.—Headboards shall not be less than 2 by 10 or 3 by 8 inches, of good sound lumber, and secured to every stanchion by five-eighths inch screw bolts passing through same and set up on same with a nut. Where headboards butt on a stanchion a piece of 1-inch lumber (pine) shall be placed over the butts, like a butt strap, the bolts to go through same and be set up with a nut on the stanchions. These headboards can be placed on either side of the stanchions. All headboards shall have 1-inch holes bored through them at proper distance, to tie the animals.

Footboards.—Footboards shall be of the same material as headboards, properly nailed or bolted to stanchions on the inside of same.

Division boards.—Division boards shall be of 2-inch sound lumber, fitted so as to be removable at any time, and so arranged as to divide the animals into lots of four, thus making compartments for this number all over the vessel. These division boards may be fitted perpendicularly or horizontally.

Flooring.—Flooring shall be of 1-inch boards, laid fore and aft, on ships with wooden decks, at the option of the owners. Iron-decked ships shall be sheathed with 2-inch spruce, hemlock, or yellow pine, or with 1-inch hemlock; but if 1-inch hemlock is used then the foot locks shall be 3 by 4 inches, to be laid so that they will properly secure the 1-inch boards, thus preventing them from slipping and at the same time acting as foot locks by showing a surface of 2 by 4 inches to correspond with the 2 by 3 inches. It is optional with the owners whether they permit sheathing to be used on their ships with wooden decks, or whether they allow foot locks to be secured to the deck. But on iron decks it is absolutely necessary (if permanent foot locks are not down) to sheath them before putting down the foot locks, in order to fasten same. Cement can be used instead of wood sheathing, and foot locks molded in same.

Foot locks.—Foot locks shall be of good, sound lumber, size 2 by 3 inches or 3 by 4 inches hemlock, laid fore and aft of ship, placed 12 inches, 14 inches, 2 feet 2 inches, and 14 inches apart, the first one distant 12 inches from inside of footboard, filled in athwart ships opposite each stanchion, properly secured to sheathing or deck, and secured by a batten to go over all from stanchion to stanchion. When troughs are used, foot locks will be placed 17, 16, 22, and 16 inches apart.

Outside planking.—All outside planking on open and closed railed ships must be properly laid fore and aft of ship and nailed to the backs of stanchions, as close as possible for the cold season, and for the warmer months the top course planking shall be left off fore and aft of ship in order to allow a free circulation of air. Nothing less than 2-inch spruce or 1½-inch yellow pine is to be used for this purpose. There shall be placed over each seam of outside planking a 1 by 5 inch batten securely nailed thereto, which will help to exclude wind and water.

PLANKING OF SHELTER DECK TO BE ERECTED ON SPAR-DECKED SHIPS.

The plank to be nailed on this deck is simply to shelter the cattle, and it should be laid with 1½-inch sound lumber.

PLANKING OF SHELTER DECK TO BE ERECTED ON WELL-DECK SHIPS.

The plank to form the shelter deck on well-deck ships shall be laid with 2-inch sound lumber sufficient to cover cattle. This plank shall be laid as closely as possible and well nailed to the beams, thus making a good deck from which to work the ship's gear.

Nails.—No nails less than 20-penny shall be used in foot locks or where 2-inch material is used. Twelve-penny nails can be used in 1½-inch plank or under.

UNDERDECK FITTINGS.

Stanchions.—Stanchions shall be of good sound lumber, 4 by 6 inches, set up at proper distances from centers so that the 6-inch way of same shall stand fore and aft and jammed in tight between the two decks, properly braced on head and from

side to side of ship. This bracing shall be of 2 by 3 inch spruce or yellow pine and be properly butted against each stanchion. Where it is found impracticable to run these braces across ship, by reason of hatches, etc., coming in the way, then they shall be well braced from hatch combings and from the obstruction which prevents running braces from side to side. The heads of these stanchions shall be braced fore and aft by 2 by 3 inch pieces well nailed on each stanchion and running fore and aft close up to the lower edge of the ship beams and butted at each end of compartment and against themselves, or chocked in underneath beam and well nailed to heads of stanchions. If upper and lower decks are wood, then the stanchions set up between decks may be secured by well cleating to each deck at heads and heels of same.

Headboards.—Headboards shall be of the same dimensions as those on the upper deck and fastened in the same manner, with 1½-inch holes bored at right distances, to tie animals.

Footboards.—Footboards shall be of same dimensions as those on upper deck, and fastened in the same manner.

Division boards.—Division boards shall be fitted perpendicularly or horizontally, and arranged so that they divide the animals into pens of four or, at end of row, into pens of five, and shall ship or unship by forming a slide on cargo battens to head and foot boards or on stanchions.

Flooring.—Where ships have decks of wood it shall be optional with owners whether they have boards put down to protect decks, or whether they allow the foot locks to be nailed to the ship's deck. (Permanent foot locks may be put down). If the decks are of iron, then wooden flooring must be laid either of 2-inch spruce with 2 by 3 inch foot locks, or of 1-inch hemlock with 3 by 4 inch foot locks, same as provided for upper decks. Cement may also be used instead of wood flooring, molding the foot locks in their proper places between same.

Foot locks.—Foot locks may be put down any size over 2 by 3 inches, but nothing under this size shall be used. They should be laid fore and aft of ship at distances mentioned in upper-deck fittings, and be well fastened to either deck or flooring, or to themselves, and properly filled in athwart ships between stanchions, same as on upper deck.

Troughs.—Suitable troughs may be formed on the footboards about 12 inches wide, when required, by nailing footboard on outside of stanchion and fitting up on the inside.

Casing for steering gear.—A suitable casing must be placed over the ship's steering gear when found necessary.

Alleyways.—Alleyways between the pens must not be less than 18 inches, unless otherwise authorized by inspectors.

VENTILATION.

5. Each compartment containing cattle must have at least four bell-mouthed ventilators, of not less than 18 inches inside diameter, and with tops exceeding 7 feet in height, two situated at each end of the compartment.

6. Vessels desiring to carry cattle on third deck may obtain special permit from the inspector of the port, when said vessel is fitted same as second deck and properly ventilated.

7. No cattle shall be loaded along the alleyways by engine room, unless side of said engine room is covered by 1½-inch grooved and tongued lumber, making a 3-inch air space.

8. No cattle shall be loaded on hatches on decks above cattle, nor shall any merchandise, freight, or food for cattle be loaded on said hatches, but said hatches shall at all times be kept clear.

9. Only two days' feed for cattle, at the discretion of port inspectors, shall be allowed to be carried on deck, properly covered, and this must be the first feed used.

10. All vessels will carry not less than four hogsheads of over 100 gallons capacity for each 100 head of cattle, and these shall be filled with fresh water before sailing and refilled as emptied.

11. Vessels will require shippers to furnish a foreman to be in charge of cattle, and one cattleman for each 25 head of animals shipped. Three-fourths of the men in charge of a shipment of cattle must be experienced men who have made previous trips with cattle, and who must satisfy the veterinary inspector of the port, by satisfactory evidence, that they are capable and reliable. Shippers will notify the inspector of the port, two days before the sailing of a vessel, of the name of the foreman to be in charge of their shipment, and of the names of the attendants, and the veterinary inspector will certify said men to the captain of the vessel, if he

has reason to believe they are reliable. The captain of the vessel will report to the veterinary inspector of the port on his return as to the conduct and efficiency of each of the men in charge of cattle on his previous trip, and such men as have been found to be unsuited to be in charge of cattle will thereafter be refused certification to go with any shipment of cattle by the inspector of the port.

12. Cattle will be tied with three-fourths inch rope, which shall not be used more than once.

13. On vessels having false decks upon which cattle are loaded, these must be removed and the manure and dirt cleaned from underneath before receiving another cargo of cattle.

14. No vessel will be allowed to take on board any cattle for export unless the same have been at the port of embarkation at least twenty-four hours before the vessel sails, except in special cases and by direction of inspector.

15. The inspector of the port may, in case he finds any of the fittings are worn, decayed, or appear to be unsound, require the same to be replaced before he clears the vessel. He will also supervise the loading of cattle and see that they are properly stowed and tied, and that all the requirements of these regulations have been complied with.

J. M. RUSK, *Secretary*.

AN ACT to provide for the safe transport and humane treatment of export cattle from the United States to foreign countries, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture is hereby authorized to examine all vessels which are to carry export cattle from the ports of the United States to foreign countries, and to prescribe by rules and regulations or orders the accommodations which said vessels shall provide for export cattle, as to space, ventilation, fittings, food, and water supply, and such other requirements as he may decide to be necessary for the safe and proper transportation and humane treatment of such animals.

SEC. 2. That whenever the owner, owners, or master of any vessel carrying export cattle shall willfully violate or cause or permit to be violated any rule, regulation, or order made pursuant to the foregoing section, the vessel in respect of which such violation shall occur may be prohibited from again carrying cattle from any port of the United States for such length of time, not exceeding one year, as the Secretary of Agriculture may direct, and such vessel shall be refused clearance from any port of the United States accordingly.

Approved, March 3, 1891.

IMPORTATION OF SHEEP AND SWINE FROM CANADA WITHOUT QUARANTINE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 25, 1891.

Whereas on May 19, 1891,¹ the Department of Agriculture, under the act of Congress approved August 30, 1890,² issued an order providing that all sheep and swine to be imported from the Dominion of Canada into the United States should be subject to a quarantine of fifteen days at the port of entry, this order being issued upon the ground, as stated therein, that the Dominion of Canada had made no provision for a quarantine for sheep and swine imported into that country from Great Britain or the Continent of Europe; and

Whereas the said Dominion of Canada, on the 6th day of June, 1891, by an order in council, duly established a quarantine of fifteen days on all sheep and swine imported into said Dominion from Great Britain or the Continent of Europe: Now, therefore, it is

Ordered, That the quarantine of sheep and swine imported from Canada into the United States, required by the aforesaid order of May, 1891, is hereby removed, and sheep and swine may be imported from Canada into the United States without quarantine, provided on inspection of said sheep or swine at the ports of entry they are found to be free of disease, and provided further that sheep or swine imported into the United States from Great Britain or the Continent of Europe through

¹ See p. 347.

² See p. 337.

Canada shall have been held in quarantine by the Canadian government for fifteen days, and the importer shall produce at the port of entry into the United States a certificate from the proper quarantine officer of said government showing the fact of said quarantine.

J. M. RUSK, *Secretary*.

CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., July 14, 1891.

To all railroad companies transporting cattle within the United States:

The attention of the officers of all railroad companies engaged in the transportation of live stock from one State or Territory into another, or whose roads form any part of a line of road transporting live stock from one State or Territory into another, is directed to the following sections of the Revised Statutes hereto annexed, viz, sections 4386, 4387, 4388, and 4389.

Complaint has been made to this Department by its officers supervising the movement of Southern and export cattle that the provisions of the foregoing sections are not complied with by many railroad companies, and that cattle and other live stock are confined in cars for a period exceeding twenty-eight hours, and that when at times they are unloaded they are not allowed the five consecutive hours for rest provided by statute.

The failure of the railroad companies to conform to this law results in much suffering to the cattle while in transit to their points of destination, which it is the intent of the law to prevent. Railroad companies will therefore make such arrangements as are necessary in their train service, and provide the necessary feeding and watering stations to comply with the above-named sections of the Revised Statutes.

J. M. RUSK, *Secretary*.

The following are the sections of the Revised Statutes of the United States referred to in the foregoing notice:

SEC. 4386. No railroad company within the United States whose road forms any part of a line of road over which cattle, sheep, swine, or other animals are conveyed from one State to another, or the owners or masters of steam, sailing, or other vessels carrying or transporting cattle, sheep, swine, or other animals from one State to another, shall confine the same in cars, boats, or vessels of any description for a longer period than twenty-eight consecutive hours, without unloading the same for rest, water, and feeding, for a period of at least five consecutive hours, unless prevented from unloading by storm or other accidental causes. In estimating such confinement the time during which the animals have been confined without such rest on connecting roads from which they are received shall be included, it being the intent of this section to prohibit their continuous confinement beyond the period of twenty-eight hours, except upon contingencies hereinbefore stated.

SEC. 4387. Animals so unloaded shall be properly fed and watered during such rest by the owner or person having the custody thereof, or in case of his default in so doing, then by the railroad company or owners or masters of boats or vessels transporting the same, at the expense of the owner or person in custody thereof; and such company, owners, or masters shall in such case have a lien upon such animals for food, care, and custody furnished, and shall not be liable for any detention of such animals.

SEC. 4388. Any company, owner, or custodian of such animals who knowingly and willingly fails to comply with the provisions of the two preceding sections shall, for every such failure, be liable for and forfeit and pay a penalty of not less than one hundred nor more than five hundred dollars. But when animals are carried in cars, boats, or other vessels in which they can and do have proper food, water, space, and opportunity to rest, the provisions in regard to their being unloaded shall not apply.

SEC. 4389. The penalty created by the preceding section shall be recovered by civil action in the name of the United States, in the circuit or district court of the United States, holden within the district where the violation may have been committed, or the person or corporation resides or carries on its business; and it shall be the duty of all United States marshals, their deputies and subordinates, to prosecute all violations which come to their notice or knowledge.

MODIFICATION OF REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., August 3, 1891.

Notice is hereby given that the regulations of the Department of February 5, 1891,¹ concerning cattle transportation, are modified so as to permit cattle coming from the area of country hereinafter named to be admitted north of the quarantine line described in said regulations for grazing purposes: Provided—

1. That the cars on which cattle are loaded from this area of country shall not have been used for transporting cattle in or out of the area described in the aforesaid regulations, as modified by this notice, and that the agent of the railroad company loading the same shall certify to this fact, which certificate shall be forwarded with the manifest or way bill and delivered to the agent of the Bureau of Animal Industry, at Louisville, Ky., or at such other point where the cattle are unloaded, and if no agent of the Bureau is stationed at such point the said certificate shall be forwarded to the Secretary of Agriculture, at Washington, D. C. In case said cars shall have been used in transporting animals in the area last aforesaid, then said cars must be cleaned and disinfected, and the agent of the railroad loading the same shall certify to said fact and forward said certificate in the manner herein provided.

2. The shipper of cattle from this area shall sign a written certificate stating that the cattle to be shipped have been on his premises, or on the premises of the person from whom purchased in said area, for the past ninety days, and that they have not come in contact with any cattle from south of the line of the herein-after-described area. This certificate of the shipper shall be delivered to the agent of the railroad company, to be forwarded by him in like manner with the certificate above mentioned.

The area above referred to, and to which this order applies, is all that section of country in the State of Tennessee lying north of the southern boundaries of the following-named counties: Lauderdale, Crockett, Gibson, Carroll, Benton, Perry, Lewis, Maury, Marshall, Bedford, Coffee, Grundy, Sequatchie, Hamilton, Meigs, McMinn, and Monroe. Also that section of country in the State of North Carolina west of the Blue Ridge Mountains, excepting the county of Henderson, in said State.

EDWIN WILLITS, *Acting Secretary.*

REGULATIONS CONCERNING CATTLE TRANSPORTATION.*

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., January 11, 1892.

To the managers and agents of railroad and transportation companies of the United States, stockmen, and others:

In accordance with section 7 of the act of Congress approved May 29, 1884,¹ entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," and of the act of Congress approved March 4, 1891, making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1892, you are hereby notified that a contagious and infectious disease known as splenic, or Southern, fever exists among cattle in the following-described area of the United States:

All that country lying east and south of a line commencing at a point on the Rio Grande River where said river intersects the one hundred and third meridian of longitude; thence, from said point of intersection, running northerly along said one hundred and third meridian of longitude, to the southwestern corner of the county of Cochran, State of Texas; thence easterly along the southern boundaries of the counties of Cochran, Hockley, Lubbock, Crosby, Dickens, and King to the one hundredth meridian of longitude; thence northerly along said one hundredth meridian to the southern boundary of the State of Kansas; thence easterly along

¹ See p. 341.

² These regulations were revoked on February 26, 1892, and others substituted. See p. 355.

³ See Report of Bureau for 1884, p. 473.

the southern boundary of the State of Kansas to the northeast corner of the Indian Territory; thence southerly along the eastern boundary of the Indian Territory to the southwestern corner of the State of Missouri; thence easterly along the southern boundary of the State of Missouri to the Mississippi River; thence, running southerly along the Mississippi River, to the southwestern corner of the county of Lauderdale, State of Tennessee; thence, running easterly, following the southern boundaries of the counties of Lauderdale, Crockett, Gibson, Carroll, Benton, Perry, Lewis, Maury, Marshall, Bedford, Coffee, Grundy, Sequatchie, Hamilton, Meigs, McMinn, and Monroe, State of Tennessee, to the eastern boundary of said State; thence, following the northern boundaries of the counties of Cherokee, Macon, Jackson, Transylvania, and Henderson, State of North Carolina, to the southeast corner of the county of Buncombe, of said State; thence in a northeasterly direction, following the Blue Ridge Mountains, to the southwestern corner of the county of Madison, State of Virginia; thence easterly along the southern boundaries of the counties of Madison, Culpeper, and Stafford; thence northerly along the eastern boundary of Stafford County to the Potomac River; thence, following the Potomac River, southerly to the Chesapeake Bay; thence easterly along the southern boundary of Maryland to the Atlantic Ocean.

From the 15th day of February to the 1st day of December, 1892, no cattle are to be transported from said area to any portion of the United States north or west of the above-described line, except by rail for immediate slaughter, and when so transported the following regulations must be observed:

1. When any cattle in course of transportation from said area are unloaded north or west of this line to be fed or watered, the places where said cattle are to be so fed or watered shall be set apart and no other cattle shall be admitted thereto.

2. On unloading said cattle at their points of destination, pens shall be set apart to receive them, and no other cattle shall be admitted to said pens; and the regulations relating to the movement of Texas cattle, prescribed by the cattle sanitary officers of the State where unloaded, shall be carefully observed. The cars that have carried said stock shall be cleansed and disinfected before they are again used to transport, store, or shelter animals or merchandise.

3. All cars carrying cattle from said area shall bear placards stating that said cars contain Southern cattle, and each of the waybills of said shipments shall have a note upon its face with a similar statement. Whenever any cattle have come from said area and shall be reshipped from any point at which they have been unloaded to other points of destination, the cars carrying said animals shall bear similar placards with like statements, and the waybills to be so stamped. At whatever points these cattle are unloaded they shall be placed in separate pens, to which no other cattle shall be admitted.

4. The cars used to transport such animals, and the pens in which they are fed and watered, and the pens set apart for their reception at points of destination, shall be disinfected in the following manner:

(a) Remove all litter and manure. This litter and manure may be disinfected by mixing it with lime, diluted sulphuric acid, or, if not disinfected, it may be stored where no cattle can come into contact with it until after December 1.

(b) Wash the cars and the feeding and watering troughs with water until clean.

(c) Saturate the walls and floors of the cars and the fencing, troughs, and chutes of the pens with a solution made by dissolving 4 ounces of chloride of lime to each gallon of water; or disinfect the cars with a jet of steam under a pressure of not less than 50 pounds to the square inch.

5. It is, however, hereby expressly provided that cattle which have been at least ninety days in the area of country hereinafter described, which lies within the above-described area, may be moved from said area by rail into the States of Colorado, Wyoming, and Montana, in accordance with the regulations made by said States for the admission of Southern cattle thereto: Provided—

(1) That cattle from said area shall go into said States only for slaughter or grazing, and shall on no account be shipped from said States into any other State or Territory of the United States before the 1st day of December, 1892.

(2) That such cattle shall not be allowed in pens or on trails or ranges that are to be occupied or crossed by cattle going to the Eastern markets, before December 1, 1892, and that these two classes of cattle shall not be allowed to come into contact.

(3) That all cars which have carried cattle from said area shall, upon unloading, at once be cleaned and disinfected in the manner provided by these regulations.

(4) That the State authorities of the States of Colorado, Wyoming, and Montana agree to enforce these provisions.

The area from which cattle may go into the States of Colorado, Wyoming, and Montana by rail for grazing purposes, as above provided, is as follows: All that country lying north and west of a line commencing at the southeastern corner of the county of Pecos, State of Texas, on the Rio Grande River; thence running northerly along the western boundary of the county of Valverde, State of Texas, to the point of intersection with the river Pecos; thence, following said river Pecos, northwesterly to the southwestern corner of the county of Upton; thence running along the southern boundary line of the counties of Upton and Tom Green to the southeastern corner of the county of Tom Green; thence northerly along the eastern boundary line of the counties of Tom Green, Nolan, and Fisher to the southern boundary of Stonewall County; thence along the southern boundaries of Stonewall and Haskell counties to the southwestern corner of Throckmorton County; thence northerly along the eastern boundary line of the counties of Haskell, Knox, and Hardeman to the Red River; thence westerly along the Red River to its point of intersection with the one hundredth meridian of longitude.

The losses resulting yearly to the owners of susceptible cattle, both in the interstate and export trade, by the contraction of this disease from exposure in unclean and infected cars and pens, and by means of the manure carried in unclean cars from place to place, have become a matter of grave and serious concern to the cattle industry of the United States. It is absolutely essential, therefore, that this cattle industry should be protected as far as possible by separating the dangerous cattle and by the adoption of efficient methods of disinfection.

Inspectors will be instructed to see that disinfection is properly done, and it is expected that transportation companies will promptly put into operation the above methods.

Very respectfully,

J. M. RUSK, *Secretary*.

REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 26, 1892.

To the managers and agents of railroad and transportation companies of the United States, stockmen, and others:

The regulations concerning cattle transportation issued by this Department January 11, 1892,¹ are hereby revoked, and the following prescribed in place thereof:

In accordance with section 7 of the act of Congress approved May 29, 1884,² entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases of domestic animals," and of the act of Congress approved March 4, 1891, making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1892, you are hereby notified that a contagious and infectious disease known as splenic, or Southern, fever exists among cattle in the following-described area of the United States:

All that country lying east and south of a line commencing at the southwest corner of Valverde County, State of Texas, on the Rio Grande River; thence running northerly along the western boundaries of Valverde and Crockett counties to the northwest corner of Crockett County; thence easterly along the northern boundaries of Crockett and Schleicher counties to the southeastern corner of Irion County; thence northerly along the eastern boundary of Irion County to the northeast corner of said county; thence northerly to the southern boundary of Coke County; thence westerly to the southwestern corner of Coke County; thence northerly along the western boundary of Coke County to the southern boundary of Mitchell County; thence easterly to the southeast corner of Mitchell County, and thence northerly along the western boundaries of Nolan and Fisher counties to the southern boundary of Kent County; thence easterly along the southern boundary of Kent County to the southwestern corner of Stonewall County; thence northerly along the western boundary of Stonewall County to the southeastern corner of Dickens County; thence easterly along the northern boundary of Stonewall County to the southwestern corner of Knox County; thence northerly along the western boundaries of Knox and Hardeman counties to the Red River; thence northwesterly following the Red River to its point of intersection with the one

¹ See p. 363.

² See Report of Bureau for 1884, p. 473.

hundredth meridian of longitude; thence northerly from said point of intersection along said one hundredth meridian to the southern boundary of the State of Kansas; thence easterly along the southern boundary of the State of Kansas to the northeast corner of the Indian Territory; thence southerly along the eastern boundary of the Indian Territory to the southwest corner of the State of Missouri; thence easterly along the southern boundary of the State of Missouri to the Mississippi River; thence running southerly along the Mississippi River to the southwestern corner of the county of Lauderdale, State of Tennessee; thence running easterly, following the southern boundaries of the counties of Lauderdale, Crockett, Gibson, Carroll, Benton, Perry, Lewis, Maury, Marshall, Bedford, Coffee, Grundy, Sequatchie, Hamilton, Meigs, McMinn, and Monroe, State of Tennessee, to the eastern boundary of said State; thence following the northern boundaries of the counties of Cherokee, Macon, Jackson, Transylvania, and Henderson, State of North Carolina, to the southeast corner of the county of Buncombe of said State; thence in a northeasterly direction, following the Blue Ridge Mountains, to the southwestern corner of the county of Madison, State of Virginia; thence easterly along the southern boundaries of the counties of Madison, Culpeper, and Stafford; thence northerly along the eastern boundary of Stafford County to the Potomac River; thence following the Potomac River southerly to the Chesapeake Bay; thence easterly along the southern boundary of the State of Maryland to the Atlantic Ocean.

From the 1st day of March to the 1st day of December, 1892, no cattle are to be transported from said area to any portion of the United States north or west of the above-described line, except by rail for immediate slaughter, and when so transported the following regulations must be observed:

1. When any cattle in course of transportation from said area are unloaded north or west of this line to be fed or watered, the places where said cattle are to be so fed or watered shall be set apart, and no other cattle shall be admitted thereto.

2. On unloading said cattle at their points of destination, pens shall be set apart to receive them, and no other cattle shall be admitted to said pens; and the regulations relating to the movement of Texas cattle, prescribed by the cattle sanitary officers of the State where unloaded, shall be carefully observed. The cars that have carried said stock shall be cleansed and disinfected before they are again used to transport, store, or shelter animals or merchandise.

3. All cars carrying cattle from said area shall bear placards stating that said cars contain Southern cattle, and each of the waybills of said shipments shall have a note upon its face with a similar statement. Whenever any cattle have come from said area and shall be reshipped from any point at which they have been unloaded to other points of destination, the cars carrying said animals shall bear similar placards with like statements, and the waybills be so stamped. At whatever point these cattle are unloaded they shall be placed in separate pens, to which no other cattle shall be admitted.

4. The cars used to transport such animals, and the pens in which they are fed and watered, and the pens set apart for their reception at points of destination, shall be disinfected in the following manner:

(a) Remove all litter and manure. This litter and manure may be disinfected by mixing it with lime, or diluted sulphuric acid, or, if not disinfected, it may be stored where no cattle can come into contact with it until after December 1.

(b) Wash the cars and the feeding and watering troughs with water until clean.

(c) Saturate the walls and floors of the cars and fencing, troughs, and chutes of the pens with a solution made by dissolving 4 ounces of chloride of lime to each gallon of water; or disinfect the cars with a jet of steam under a pressure of not less than 50 pounds to the square inch.

5. It is expressly provided that cattle may be moved from those counties in the State of Tennessee which lie south of the line hereinabove described to those counties lying north of said line in said State, for grazing purposes, in accordance with the regulations of the authorities of the State of Tennessee.

6. It is further expressly provided that cattle which have been at least ninety days in the counties of Coke, the eastern portion of Tom Green, Nolan, Fisher, Stonewall, Haskell, Knox, and Hardeman, State of Texas, which lie within the above-described area, may be moved from said counties by rail into the States of Colorado, Wyoming, and Montana, in accordance with the regulations made by said States for the admission of Southern cattle thereto: Provided—

(1) That cattle from said area shall go into said States only for slaughter or grazing, and shall on no account be shipped from said States into any other State or Territory of the United States before the 1st day of December, 1892.

(2) That such cattle shall not be allowed in pens or on trails or on ranges that are to be occupied or crossed by cattle going to the Eastern markets before December 1, 1892, and that these two classes of cattle shall not be allowed to come into contact.

(3) That all cars which have carried cattle from said area shall, upon unloading, at once be cleaned and disinfected in the manner provided by these regulations.

(4) That the State authorities of the States of Colorado, Wyoming, and Montana agree to enforce these provisions.

The losses resulting yearly to the owners of susceptible cattle, both in the interstate and export trade, by the contraction of this disease from exposure in unclean and infected cars and pens, and by means of the manure carried in unclean cars from place to place, have become a matter of grave and serious concern to the cattle industry of the United States. It is absolutely essential, therefore, that this cattle industry should be protected as far as possible by separating the dangerous cattle and by the adoption of efficient methods of disinfection.

Inspectors will be instructed to see that disinfection is properly done, and it is expected that transportation companies will promptly put into operation the above methods.

Very respectfully,

J. M. RUSK, *Secretary.*

MODIFICATION OF REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 13, 1892.

NOTICE.

Notice is hereby given that the regulations of the U. S. Department of Agriculture, dated February 26, 1892,¹ concerning cattle transportation, are modified so as to exclude the counties of Orange, Albemarle, Greene, Nelson, and Amherst, in the State of Virginia, from the infected area described in said regulations, and the quarantine line established by said regulations is hereby changed so as to run along the southern boundaries of said counties, placing these counties north of said line.

J. M. RUSK, *Secretary.*

VIOLATION OF REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., July 18, 1892.

To the managers and agents of railroad and transportation companies of the United States, stockmen, and others:

Whereas the county of Uvalde, State of Texas, was, by an order duly made by the Secretary of Agriculture on the 26th day of February, 1892,¹ in pursuance of the act of Congress of May 29, 1884,² and acts supplemental thereto, declared to be infected with a contagious and infectious disease known as splenetic, or Southern, fever; and

Whereas the county of Pecos, State of Texas, was by said order included in the area of country declared to be free of the said contagious and infectious disease; and

Whereas a large number of cattle have been moved from the said county of Uvalde into the county of Pecos, State of Texas, since the making of said order, and such movement of cattle is a violation of said order, and the cattle moved into Pecos County having rendered all cattle in said county dangerous to be moved into other uninfected areas of the United States: It is, therefore,

Ordered, That no cattle shall be moved from the county of Pecos, State of Texas, into parts of the United States north or west of the said county of Pecos except for purposes of immediate slaughter, and then to be kept separate as infected cattle.

J. M. RUSK, *Secretary.*

¹ See p. 355.

² See Report of Bureau for 1884, p. 473.

ERADICATION OF PLEURO-PNEUMONIA.

U. S. DEPARTMENT OF AGRICULTURE.

OFFICE OF THE SECRETARY.

PROCLAMATION.

To all whom it may concern:

Notice is hereby given that the quarantines heretofore existing in the counties of Kings and Queens, State of New York, and the counties of Essex and Hudson, State of New Jersey, for the suppression of contagious pleuro-pneumonia among cattle, are this day removed.

The removal of the aforesaid quarantines completes the dissolving of all quarantines established by this Department in the several sections of the United States for the suppression of the above-named disease.

No case of this disease has occurred in the State of Illinois since December 23, 1887, a period of more than four years and eight months.

No case has occurred in the State of Pennsylvania since September 29, 1888, a period of four years within a few days.

No case has occurred in the State of Maryland since September 18, 1889, a period of three years.

No case has occurred in the State of New York since April 30, 1891, a period of more than one year and four months.

No case has occurred in the State of New Jersey since March 25, 1892, a period of six months, and no case has occurred in any other portion of the United States within the past five years.

I do therefore hereby officially declare that the United States is free from the disease known as contagious pleuro-pneumonia.

Done at the city of Washington, D. C., this 26th day of September, A. D. 1892.

J. M. Rusk, *Secretary*.

REGULATIONS CONCERNING IMPORTATION OF CATTLE FROM CANADA.

U. S. DEPARTMENT OF AGRICULTURE,

OFFICE OF THE SECRETARY,

Washington, D. C., February 3, 1893.

Whereas, under the act of Congress approved August 30, 1890,¹ it has been provided by the Department of Agriculture, in order to protect the cattle of the United States from contagious diseases now existing in foreign countries, that all cattle imported from Great Britain or the Continent of Europe must be held in quarantine for a period of not less than ninety days; and

Whereas it has recently been officially declared by the authorities of Great Britain that cattle imported into England from the Dominion of Canada have been affected with a contagious disease known as contagious pleuro-pneumonia, and have communicated the same to British cattle, and that said disease exists in the said Dominion of Canada; and

Whereas the existence of contagious pleuro-pneumonia in the Dominion of Canada, as declared by the British authority, would be dangerous to the stock interests of the United States, and in case of the importation of neat cattle without quarantine might again lead to the introduction of this destructive disease into the United States, which disease has recently been exterminated at great expense: Now, therefore, it is

Ordered, That all cattle to be imported from the Dominion of Canada into the United States are hereby made subject to the regulations of the Department of Agriculture of October 13, 1890,² and the exceptions contained in the third and sixth regulations of said date, as applicable to Canadian cattle, are hereby rescinded, and cattle imported from Canada are subject to the same conditions and requirements as if they were imported into the United States from Great Britain or the Continent of Europe.

It is further ordered, That all neat cattle imported from the Dominion of Canada must be entered at the port of Buffalo, N. Y., which is hereby designated as a quarantine station, under the act of Congress approved August 30, 1890, entitled, "An act providing for the inspection of meats for exportation, and prohibiting the importation of adulterated articles of food or drink, and authorizing the President

¹ See p. 335.² See p. 337.

to make proclamation in certain cases, and for other purposes," and as much of regulation 1, of the regulations of the Department of Agriculture of October 13, 1890, as names other ports of entry along the Canadian border as quarantine stations for cattle, is hereby suspended.

J. M. RUSK, *Secretary*.

REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 15, 1893.

To the managers and agents of railroads and transportation companies of the United States, stockmen, and others:

In accordance with section 7 of the act of Congress approved May 29, 1884,¹ entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," and of the act of Congress approved July 5, 1892, making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1893, you are hereby notified that a contagious and infectious disease known as splenetic, or Southern, fever exists among cattle in the following-described area of the United States:

All that country lying east and south of a line commencing at the southwest corner of the county of Pecos, State of Texas, on the Rio Grande River; thence following the western boundary of Pecos County to the southeast corner of Reeves County; thence following the boundary line between the counties of Pecos and Reeves to the Pecos River; thence southeasterly following the said Pecos River to the northwest corner of Crockett County; thence easterly along the northern boundaries of Crockett and Schleicher counties to the southeastern corner of Irion County; thence northerly along the eastern boundary of Irion County to the northeast corner of said county; thence northerly to the southern boundary of Coke County; thence westerly to the southwestern corner of Coke county; thence northerly along the western boundary of Coke County to the southern boundary of Mitchell County; thence easterly to the southeast corner of Mitchell County and thence northerly along the western boundaries of Noland and Fisher counties to the southern boundary of Kent County; thence easterly along the southern boundary of Kent County to the southwestern corner of Stonewall County; thence northerly along the western boundary of Stonewall County to the southeastern corner of Dickens County; thence easterly along the northern boundary of Stonewall County to the southwestern corner of Knox County; thence northerly along the western boundaries of Knox and Hardeman counties to the Red River; thence northwesterly following the Red River to its point of intersection with the one hundredth meridian of longitude; thence northerly from said point of intersection along said one hundredth meridian to the southern boundary of the State of Kansas; thence easterly along the southern boundary of the State of Kansas to the northeast corner of the Indian Territory; thence southerly along the eastern boundary of the Indian Territory to the southwest corner of the State of Missouri; thence easterly along the southern boundary of the State of Missouri to the Mississippi River; thence running southerly along the Mississippi River to the southwestern corner of the county of Lauderdale, State of Tennessee; thence running easterly following the southern boundaries of the counties of Lauderdale, Crockett, Gibson, Carroll, Benton, Perry, Lewis, Maury, Marshall, Bedford, Coffee, Grundy, and Sequatchie to the southwest corner of Hamilton County; thence northerly along the boundary line between the counties of Sequatchie and Hamilton to the southwest corner of Rhea County; thence easterly along the southern boundaries of the counties of Rhea, Meigs, McMinn, and Monroe, State of Tennessee, to the eastern boundary of said State; thence following the northern boundaries of the counties of Cherokee, Macon, Jackson, Transylvania, and Henderson, State of North Carolina, to the southeast corner of the county of Buncombe of said State; thence in a northeasterly direction following the Blue Ridge Mountains to the southwestern corner of the county of Amherst, State of Virginia; thence southeasterly along the southern boundary of the county of Amherst to the western boundary of the county of Appomattox; thence northeasterly along the eastern boundaries of the counties of Amherst, Nelson, and Albemarle to the southern boundary of the county of Orange; thence along the southern boundary

¹ See Report of Bureau for 1884, p. 473.

of the county of Orange to the boundary line of the county of Spottsylvania; thence along the eastern boundary of the county of Orange to the southern boundary of the county of Culpeper; thence easterly along the southern boundaries of the counties of Culpeper and Stafford to the boundary of King George County; thence northerly along the eastern boundary of Stafford County to the Potomac River; thence following the Potomac River southerly to the Chesapeake Bay; thence easterly along the southern boundary of the State of Maryland to the Atlantic Ocean.

From the 15th day of February to the 1st day of December, 1898, no cattle are to be transported from said area to any portion of the United States north or west of the above-described line, except by rail for immediate slaughter, and when so transported the following regulations must be observed:

1. When any cattle in course of transportation from said area are unloaded north or west of this line to be fed or watered, the places where said cattle are to be so fed or watered shall be set apart, and no other cattle shall be admitted thereto.

2. On unloading said cattle at their points of destination pens shall be set apart to receive them, and no other cattle shall be admitted to said pens, and the regulations relating to the movement of Texas cattle, prescribed by the cattle sanitary officers of the State where unloaded, shall be carefully observed. The cars that have carried said stock shall be cleaned and disinfected before they are again used to transport, store, or shelter animals or merchandise.

3. All cars carrying cattle from said area shall bear placards stating that said cars contain Southern cattle, and each of the waybills of said shipments shall have a note upon its face with a similar statement. Whenever any cattle have come from said area and shall be reshipped from any point at which they have been unloaded to other points of destination, the cars carrying said animals shall bear similar placards with like statements, and the waybills be so stamped. At whatever point these cattle are unloaded they shall be placed in separate pens, to which no other cattle shall be admitted.

4. The cars used to transport such animals, and the pens in which they are fed and watered, and the pens set apart for their reception at points of destination, shall be disinfected in the following manner:

(a) Remove all litter and manure. This litter and manure may be disinfected by mixing it with lime or diluted sulphuric acid, or if not disinfected, it may be stored where no cattle can come in contact with it until after December 1.

(b) Wash the cars and the feeding and watering troughs with water until clean.

(c) Saturate the walls and floors of the cars and fencing, troughs, and chutes of the pens with a solution made by dissolving 4 ounces of chloride of lime to each gallon of water. Or disinfect the cars with a jet of steam under a pressure of not less than 50 pounds to the square inch.

5. It is further expressly provided that cattle which have been at least ninety days in the counties of Coke, Nolan, Fisher, Stonewall, Haskell, Knox, and Hardeman, State of Texas, which lie within the above-described area, may be moved from said counties by rail into the States of Colorado, Wyoming, Montana, and South Dakota in accordance with the regulations made by said States for the admission of Southern cattle thereto: Provided—

(1) That cattle from said area shall go into said States only for slaughter or grazing, and shall on no account be shipped from said States into any other State or Territory of the United States before the 1st day of December, 1893.

(2) That such cattle shall not be allowed in pens or on trails or on ranges that are to be occupied or crossed by cattle going to the Eastern markets before December 1, 1893, and that these two classes of cattle shall not be allowed to come into contact.

(3) That all cars which have carried cattle from said area shall, upon unloading, at once be cleaned and disinfected in the manner provided by these regulations.

(4) That the State authorities of the States of Colorado, Wyoming, Montana, and South Dakota agree to enforce these provisions.

The losses resulting yearly to the owners of susceptible cattle, both in the interstate and export trade, by the contraction of this disease from exposure in unclean and infected cars and pens, and by means of the manure carried in unclean cars from place to place, have become a matter of grave and serious concern to the cattle industry of the United States. It is absolutely essential, therefore, that this cattle industry should be protected as far as possible by separating the dangerous cattle and by the adoption of efficient methods of disinfection.

Inspectors will be instructed to see that disinfection is properly done, and it is expected that transportation companies will promptly put into operation the above methods.

Very respectfully,

J. M. RUSK, *Secretary.*

INSPECTION AND QUARANTINE OF CANADIAN CATTLE FOR EXHIBITION AT WORLD'S COLUMBIAN EXPOSITION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 21, 1893.

The following regulations governing the inspection and quarantine of Canadian cattle, intended for exhibition at the Columbian Exposition at Chicago, Ill., are hereby prescribed:

1. Any person contemplating the exhibition at the Columbian Exposition of neat cattle of Canadian origin must make application to the Secretary of Agriculture for a permit to import animals for that purpose. Said application must give the number of animals and a description of each, covering breed, registration number, and at which of the ports hereinafter named said animals are to be imported, and the names of the railroads by which and over which said animals are to be transported to the city of Chicago, Ill. Said application must be accompanied by a certificate from a veterinary inspector of the Dominion of Canada where said cattle are located, affirming that no contagious pleuro-pneumonia, foot-and-mouth disease, or rinderpest has existed in said district for the past year; also that the cattle have been examined by said veterinarian and are free from contagious diseases, including tuberculosis.

2. The Secretary of Agriculture, upon receiving an application as above provided, will issue a permit for the importation of neat cattle of Canadian origin to be exhibited at the Columbian Exposition at Chicago, Ill., and excepting said cattle from the quarantine of ninety days provided by the order of the U. S. Department of Agriculture issued February 3, 1893,¹ upon condition that these regulations are strictly complied with.

3. The said cattle must be loaded at point of shipment into clean and disinfected cars for transport to the United States, and a certificate from the railroad agent must accompany said cars showing that the same were duly cleaned and disinfected in the manner prescribed in the regulations of the U. S. Department of Agriculture of February 15, 1893,² entitled "Regulations concerning cattle transportation."

4. All Canadian cattle entering the United States for exhibition at the Columbian Exposition must be loaded and shipped in cars in which they can have proper food, water, space, and opportunity to rest, and said cattle are not to be unloaded until they reach the Exposition grounds at Chicago, Ill.

5. All cattle coming under the provisions of these regulations must be entered either at the port of Buffalo, N. Y., or Detroit, Mich., and on their arrival at either of said ports the inspector of the Bureau of Animal Industry at said port will countersign the permit herein provided for and allow the cattle, if free from disease, to proceed to Chicago, subject to a veterinary inspection at that point.

J. M. RUSK, *Secretary.*

MODIFICATION OF REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., March 13, 1893.

Notice is hereby given that the regulations of the Department of Agriculture, dated February 15, 1893,² concerning cattle transportation, are modified so as to permit cattle that have been in the counties of Wilbarger, Baylor, Throckmorton, Shackelford, Jones, and Pecos, State of Texas, since January 1, 1893, and have not come into contact with any cattle brought into said counties from other counties in the infected district since said date, to be moved from the said counties by rail into the States of Colorado, Wyoming, Montana, North Dakota, and South Dakota, in accordance with the regulations made by said States for the admission of Southern cattle thereto: Provided—

1. That a permit shall first be obtained from the Secretary of Agriculture for such movement. The application for said permit must state the name of the county in which said cattle are located, the name of the owner of said cattle, the

¹ See p. 358.

² See p. 359.

number of cattle to be moved, and the route over which said cattle are to be transported to the above-named States.

2. That said permit shall be forwarded to the inspector of the Department stationed at Kansas City, Mo., who will detail an officer to inspect said cattle and ascertain whether they are entitled to be shipped under the provisions of this order, and who, upon finding that the same are so entitled, will countersign said permit and supervise the movement of said cattle to the point of shipment. The said officer, before delivering such permit, shall obtain affidavits of the owner or manager of the cattle and of two reputable and disinterested persons, showing that they are acquainted with the cattle sought to be shipped, and that they have known said cattle since the 1st day of January, 1893, and that said cattle have been kept in the territory described above and have not come into contact with any other Southern cattle. These affidavits will be forwarded by him to the Department of Agriculture.

It is further ordered that the second proviso of the fifth rule of the regulations of February 15, 1893, providing that cattle moved into the above-named States under said rule shall not be allowed in pens or on trails or on ranges that are to be occupied or crossed by cattle going to the Eastern markets before December 1, 1893, and that these two classes of cattle shall not be allowed to come into contact, is hereby rescinded.

J. STERLING MORTON, *Secretary*.

MODIFICATION OF REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., May 19, 1893.

Notice is hereby given that the regulations of the U. S. Department of Agriculture of date February 15, 1893,¹ concerning cattle transportation, are modified so as to permit cattle that have been in the counties of Cherokee, Clay, Macon, Jackson, and Transylvania, State of North Carolina, since the 1st day of January, 1893, and have not come in contact with any cattle brought into said counties from other counties in the infected area described in said regulations since said date, to be moved from the said counties by rail into the States of Kentucky, Tennessee, and Virginia for grazing purposes, in accordance with the regulations made by said States for the admission of Southern cattle thereto.

J. STERLING MORTON, *Secretary*.

INSTRUCTIONS TO INSPECTORS.²

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY,
Washington, D. C., September 13, 1893.

To inspectors of the Bureau of Animal Industry in charge of the inspection of animals slaughtered at abattoirs throughout the United States:

Supplementary to the order of the Secretary of Agriculture of this date directing the ante and post mortem examination of all swine slaughtered at the abattoirs where the U. S. Department of Agriculture is carrying on inspection, the following instructions are issued as a guide to inspectors in the condemnation of cattle, sheep, and swine and their carcasses.

All animals found on either ante or post mortem examination to be affected as follows are to be condemned and the carcasses thereof stamped with the "condemnation" stamp supplied by the Department, and inspectors will see that said carcasses are placed in the rendering tanks of the abattoirs:

1. Hog cholera.
2. Swine plague.
3. Charbon, or anthrax.
4. Malignant epizootic catarrh.

¹ See p. 359.

² See superseding regulations on p. 384.

5. Pyæmia and septicæmia.
 6. Mange, or scab, in advanced stages.
 7. Advanced stages of actinomycosis, or lumpy jaw.
 8. Inflammation of the lungs or of the intestines.
 9. Texas fever.
 10. Extensive or generalized tuberculosis.
 11. Animals in an advanced state of pregnancy or which have recently given birth to young.
 12. Any disease or injury causing elevation of temperature or affecting the system of the animal to a degree which would make the flesh unfit for human food.
- Any organ or part of a carcass which is badly bruised or affected by tuberculosis, actinomycosis, abscess, suppurating sore, or tapeworm cysts should be condemned.

D. E. SALMON, *Chief of Bureau.*

Approved:

J. STERLING MORTON, *Secretary.*

SUPPLEMENTARY REGULATIONS FOR THE INSPECTION OF LIVE STOCK AND THEIR PRODUCTS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., September 13, 1893.

To inspectors in charge of abattoirs under the regulations of the U. S. Department of Agriculture of March 25, 1891:

You are hereby notified that beginning October 1, 1893, the inspection of all hogs slaughtered at the abattoir which you are in charge of will be inaugurated.

This inspection will be carried on in accordance with the aforesaid regulations of March 25, 1891,¹ covered from rule 2 down to and including rule 12 of said regulations, and will be similar in all respects to the system now in operation applied to the inspection of cattle and sheep. It will include a careful ante-mortem examination of all hogs, as required by rule 6, and a subsequent post-mortem examination, as required by rule 7.

The carcasses of all hogs that are to enter into interstate trade as dressed pork will be tagged in the same manner as cattle are now marked for identification. The products of hog carcasses which enter into interstate trade will be stamped in the same manner as are the products of cattle.

No microscopic examination will be made of hogs slaughtered for interstate trade, but this examination will be confined to those intended for the export trade and will be carried on as heretofore, and only at abattoirs which export pork products to countries requiring a certificate from this Government to secure the admission of such meats. Hereafter all inspectors issuing certificates for export of pork products which have been microscopically examined will enter upon the same the number of each stamp, marking the packages for which said export certificate is issued.

All hogs found upon either ante-mortem or post-mortem examination to be diseased or for any reason unfit for human food will be condemned by the inspector in charge of the abattoir, who will see that the carcasses of the same are tanked by the owners of the abattoir. In case the owners of the abattoir refuse to tank such carcasses, then the inspector will tag said animals with tags for condemned meat, which will be furnished by this Department.

Owners of abattoirs are warned against removing the tags so attached to condemned carcasses, and are notified that they will be prosecuted, under section 4 of the act of Congress of March 3, 1891,² for any such attempt to tamper with the device for marking condemned animals as prescribed by this regulation.

Accompanying and forming part of this order are directions to inspectors, designating the diseases and conditions which render animals unfit for human food, and for which they shall be condemned by the inspector.

J. STERLING MORTON, *Secretary.*

¹ See p. 343.

² See p. 345.

NOTICE OF INSPECTION OF SWINE FOR EXPORT TRADE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., September 13, 1893.

To the owners and managers of all abattoirs and packing houses engaged in the slaughtering, curing, and packing of swine:

You are hereby notified that, beginning October 1, 1893, this Department will commence an inspection of all swine slaughtered in the United States for both interstate and export trade, as required by section 8 of the act of Congress approved March 3, 1891,¹ entitled "An act to provide for the inspection of live cattle, hogs, and the carcasses and products thereof which are the subjects of interstate commerce, and for other purposes." Your attention is called to the fact that this inspection is compulsory upon this Department, and that it is not optional with the slaughterer or packer to accept such inspection.

You are requested, on receipt of this notice, to forward a statement to the Secretary of Agriculture at Washington, D. C., giving briefly the following information:

Location of abattoir or pork-packing establishment.

Name of firm operating the same.

Average number of hogs slaughtered daily, if any, which go into the interstate or export trade, and the relative number to each trade.

Number of carcasses of swine packed at your abattoir weekly and the form of the products put up.

The number of hog carcasses received from other slaughterhouses and packed by you, together with the name and location of the abattoirs from which purchased.

There is inclosed herewith, for your information, a copy of the regulations of the Department of Agriculture of date March 25, 1891,² for the inspection of live stock and their products, and supplementary regulations issued September 13, 1893,³ especially covering the inspection of swine and their products. Early attention to this notice is requested.

Very respectfully,

J. STERLING MORTON, *Secretary.*

NOTE.—See superseding regulations on p. 384.

MODIFICATION OF SHIP REGULATIONS.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY,
Washington, D. C., December 5, 1893.

To inspectors of animals and vessels at ports of export:

Hereafter, in loading cattle on either spar decks or other decks, you will require that four of the largest hatches shall be kept free of cattle, but transportation companies will be allowed to put fittings and place cattle upon any of the hatches which may exist in excess of this number.

You will select hatches to be kept clear of cattle by taking one hatch forward and one aft and two amidships, so that the spaces between these will be proportioned as equal as possible.

J. STERLING MORTON, *Secretary.*

REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 5, 1894.

To the managers and agents of railroad and transportation companies of the United States, stockmen, and others:

In accordance with section 7 of the act of Congress approved May 29, 1884,⁴ entitled "An act for the establishment of a Bureau of Animal Industry, to prevent

¹ See p. 345.

² See p. 343.

³ See p. 363.

⁴ See Report of Bureau for 1884, p. 473.

the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," and of the act of Congress approved March 3, 1893, making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1894, you are hereby notified that a contagious and infectious disease known as splenic, or Southern, fever exists among cattle in the following-described area of the United States:

All that country lying east and south of a line commencing at the southwest corner of the county of Pecos, State of Texas, on the Rio Grande River; thence following the western boundary of Pecos County to the southeast corner of Reeves County; thence following the boundary line between the counties of Pecos and Reeves to the Pecos River; thence southeasterly, following the said Pecos River, to the northwest corner of Crockett County; thence easterly along the northern boundaries of Crockett and Schleicher counties to the southeastern corner of Irion County; thence northerly along the eastern boundary of Irion County to the northeast corner of said county; thence northerly to the southern boundary of Coke County; thence westerly to the southwestern corner of Coke County; thence northerly along the western boundary of Coke County to the southern boundary of Mitchell County; thence easterly to the southeast corner of Mitchell County, and thence northerly along the western boundary of Nolan County to the northwest corner of Nolan County; thence easterly along the northern boundary of said county to the southwestern corner of Jones County; thence northerly along the western boundary of Jones County to the southern boundary of Stonewall County; thence easterly along the northern boundaries of Jones and Shackelford counties to the southwestern corner of Throckmorton County; thence northerly along the western boundaries of Throckmorton, Baylor, and Wilbarger counties to the Red River; thence northwesterly following the Red River to its point of intersection with the one hundredth meridian of longitude; thence northerly from said point of intersection along said one hundredth meridian to the southern boundary of the State of Kansas; thence easterly along the southern boundary of the State of Kansas to the northeast corner of the Indian Territory; thence southerly along the eastern boundary of the Indian Territory to the southwestern corner of Washington County, State of Arkansas; thence easterly along the southern boundaries of the counties of Washington, Madison, Newton, Searcy, and Stone to the western boundary of Independence County; thence southerly along the western boundary of Independence County to the southwest corner of Independence County; thence easterly along the southern boundary of Independence County to the southeast corner of Independence County; thence northerly along the eastern boundary of said county to its northeastern corner; thence easterly along the southern boundary of Lawrence County to the southeast corner of Lawrence County; thence northerly along the eastern boundary of said county to the southwestern corner of Greene County; thence easterly along the southern boundary of Greene County to the southern boundary of the State of Missouri, and along said southern boundary of the State of Missouri to the Mississippi River; thence southerly along the Mississippi River to the southern boundary of the State of Tennessee; thence easterly along the southern boundary of the State of Tennessee to the western boundary of the State of North Carolina; thence along the southern boundaries of the counties of Cherokee, Clay, Macon, Jackson, and Transylvania, State of North Carolina, to the southeast corner of the county of Transylvania; thence northwesterly along the eastern boundary of Transylvania County to the southwest corner of the county of Buncombe; thence in a northeasterly direction, following the Blue Ridge Mountains, to the southwestern corner of the county of Amherst, State of Virginia; thence southeasterly along the southern boundary of the county of Amherst to the western boundary of the county of Appomattox; thence northeasterly along the eastern boundaries of the counties of Amherst, Nelson, and Albemarle to the southern boundary of the county of Orange; thence along the southern boundary of the county of Orange to the boundary line of the county of Spottsylvania; thence along the eastern boundary of the county of Orange to the southern boundary of the county of Culpeper; thence easterly along the southern boundaries of the counties of Culpeper and Stafford to the boundary of King George County; thence northerly along the eastern boundary of Stafford County to the Potomac River; thence following the Potomac River southerly to the Chesapeake Bay; thence easterly along the southern boundary of the State of Maryland to the Atlantic Ocean.

From the 15th day of February to the 1st day of December, 1894, no cattle are to be transported from said area to any portion of the United States north or west of the above-described line, except by rail for immediate slaughter, and when so transported the following regulations must be observed:

1. When any cattle in course of transportation from said area are unloaded north

or west of this line to be fed or watered, the places where said cattle are to be so fed or watered shall be set apart and no other cattle shall be admitted thereto.

2. On unloading said cattle at their points of destination pens shall be set apart to receive them, and no other cattle shall be admitted to said pens; and the regulations relating to the movement of Texas cattle, prescribed by the cattle sanitary officers of the State where unloaded, shall be carefully observed. The cars that have carried said stock shall be cleansed and disinfected before they are again used to transport, store, or shelter animals or merchandise.

3. All cars carrying cattle from said area shall bear placards stating that said cars contain Southern cattle, and each of the waybills of said shipments shall have a note upon its face with a similar statement. Whenever any cattle have come from said area and shall be reshipped from any point at which they have been unloaded to other points of destination, the cars carrying said animals shall bear similar placards with like statements and the waybills be so stamped. At whatever point these cattle shall be unloaded, they shall be placed in separate pens, to which no other cattle shall be admitted.

4. The cars used to transport such animals, and the pens in which they are fed and watered, and the pens set apart for their reception at points of destination, shall be disinfected in the following manner:

- (a) Remove all litter and manure. This litter and manure may be disinfected by mixing it with lime or diluted sulphuric acid, or, if not disinfected, it may be stored where no cattle can come into contact with it until after December 1.
- (b) Wash the cars and the feeding and watering troughs with water until clean.
- (c) Saturate the walls and floors of the cars and fencing, troughs, and chutes of the pens with a solution made by dissolving 4 ounces of chloride of lime to each gallon of water; or disinfect the cars with a jet of steam under a pressure of not less than 50 pounds to the square inch.

5. It is further expressly provided that cattle which have been in the counties of Wilbarger, Baylor, Throckmorton, Shackelford, Jones, Nolan, Coke, and the northern half of Pecos county since January 1, 1894, and have not come into contact with any cattle brought into said counties from any other counties in the infected area since that date may be moved from the said counties by rail into the States of Colorado, Wyoming, Montana, North Dakota, and South Dakota, in accordance with the regulations made by said States for the admission of Southern cattle thereto: Provided—

(1) That a permit shall first be obtained from the Secretary of Agriculture for such movement. The application for said permit must state the name of the county in which said cattle are located, the name of the owner of said cattle, the number of cattle to be moved, and the route over which said cattle are to be transported to the above-named States.

(2) That said permit shall be forwarded to the inspector of the Department stationed at Kansas City, Mo., who will detail an officer to inspect said cattle and ascertain whether they are entitled to be shipped under the provisions of this order, and who, upon finding that the same are so entitled, will countersign said permit and supervise the movement of said cattle to point of shipment. The said officer before delivering such permit shall obtain affidavits of the owner or manager of the cattle and of two reputable and disinterested persons, showing that they are acquainted with the cattle sought to be shipped and that they have known said cattle since the 1st day of January, 1894, and that said cattle have been kept in the territory described above and have not come into contact with any other Southern cattle. These affidavits will be forwarded by him to the Department of Agriculture.

(3) That cattle from said area shall go into said States only for slaughter or grazing, and shall on no account be reshipped from said States into any other State or Territory of the United States before the 1st day of December, 1894.

(4) That all cars which have carried cattle from said area shall, upon unloading, at once be cleaned and disinfected in the manner provided by these regulations.

(5) That the State authorities of the States of Colorado, Wyoming, Montana, North Dakota, and South Dakota agree to enforce these provisions.

The losses resulting yearly to the owners of susceptible cattle, both in the interstate and export trade, by the contraction of this disease from exposure in unclean and infected cars and pens, and by means of the manure carried in unclean cars from place to place, have become a matter of grave and serious concern to the cattle industry of the United States. It is absolutely essential, therefore, that this cattle industry should be protected as far as possible by separating the dangerous cattle and by the adoption of efficient methods of disinfection.

Inspectors will be instructed to see that disinfection is properly done, and it is expected that transportation companies will promptly put into operation the above methods.

Very respectfully,

J. STERLING MORTON, *Secretary*.

AMENDMENT TO REGULATIONS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 14, 1894.

To all inspectors in charge of meat inspection:

From and after April 2, 1894, you will discontinue the use of tacks in affixing stamps upon packages of inspected products intended for the export or interstate trade, and that portion of rule 10 of the regulations of March 25,¹ 1891, which requires their use in this connection is hereby rescinded.

In order that the stamps may be protected, and to insure uniformity in affixing, inspectors will require of the proprietors of abattoirs and packing establishments the adoption of cases suitable for one of the two methods mentioned below:

1. The stamp may be affixed in a grooved space let into the box of sufficient size to admit it, similar to that required by the Internal Revenue Bureau for the stamping of packages of plug tobacco.

2. Stamps may be placed on either end of the package, providing the sides are made to project at least half an inch to afford the necessary protection from abrasion.

Very respectfully,

J. STERLING MORTON, *Secretary*.

SHEEP REGULATIONS.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY,
Washington, D. C., March 1, 1894.

During the winter months there should be one experienced man to each 150 sheep and during the summer one to each 200 sheep.

Sheep should not be loaded in tiers during the summer, particularly on "between decks," as the floors between the tiers are tight and the sheep would not obtain sufficient air. The minimum space from floor to ceiling should be 3 feet to each tier.

Large sheep should be allowed a space of 4 feet by 15 inches. Lambs and small yearlings should have a space of 4 feet by 1 foot. Four large sheep are sufficient for the space allotted to one bullock, as one tier. Sheep pens should not measure more than 8 feet in width, as it is best to have only two rows of sheep in each pen, with alleyways and water troughs on each side of pens, so that both rows of sheep can feed and water at the same time. Pens should not exceed 20 feet in length, which is sufficient space for 16 large sheep and 20 lambs. A pen 20 feet long and 8 feet wide will hold 32 large sheep or 40 lambs. This should be the limited number of sheep for each pen, and a less number would be better.

P. L. LYLES, *Acting Chief of Bureau*.

CONDEMNED CARCASSES IN COOLING ROOM WITH EDIBLE MEATS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 19, 1894.

To all United States inspectors in charge of meat inspection under the direction of the Bureau of Animal Industry of the United States Department of Agriculture:

I am credibly informed that at some of the killing places where United States meat inspection has been established condemned carcasses or parts of condemned carcasses have been taken into the cooling rooms set apart for inspected edible meats.

¹ See p. 343.

This practice is hereby ordered discontinued. In future condemned carcasses and parts of condemned carcasses must be immediately removed to the tanks and deposited therein in such manner as to render them impossible of withdrawal for market purposes.

The inspector in charge at each slaughterhouse shall supervise the tanking of all condemned carcasses from and after the reception of this order; or, in case of his inability to personally superintend the tanking, the supervision shall be by some reliable employee of the United States Department of Agriculture.

United States inspectors connected with the Bureau of Animal Industry will tell the proprietors of slaughterhouses or abattoirs or killing places of the contents of this order.

Objection on the part of any proprietor to the enforcement of this order will be sufficient cause for withdrawing inspection from the establishment wherein the objection is raised. And then, following the withdrawal of the inspection, it will be my duty to give publicity to the fact that the aforesaid establishment is desirous of placing meat upon the market which will not bear inspection as required by the statutes of the United States.

Very respectfully,

J. STERLING MORTON, *Secretary.*

MODIFICATION OF SHIP REGULATIONS.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY,
Washington, D. C., July 20, 1894.

To inspectors of animals and vessels at ports of export:

Hereafter you will prohibit the loading of cattle upon any hatch where the combings exceed 16 inches in height, and you will require between deck hatches to have not less than 6 feet vertical space between the beams over head and the hatch combings under foot for cattle with horns, and 5 feet 6 inches vertical space for cattle without horns.

D. E. SALMON, *Chief of Bureau.*

Approved:

J. STERLING MORTON, *Secretary.*

MODIFICATIONS OF SHIP REGULATIONS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., October 23, 1894.

To inspectors of cattle and vessels at ports of export:

The following modifications of the regulations of this Department of June 6, 1891,¹ are hereby made so as to include wrought-iron fittings, as hereinafter specified, in the permanent fittings to be erected on cattle-carrying steamers:

STANCHIONS.

Stanchions should be of wrought iron, not less than 2 inches in diameter, set in iron sockets above and below, and fastened with five-eighths inch bolts.

HEAD PIPES.

In place of the present headboards, two wrought-iron pipes, not less than 2 inches in diameter, may be used, placed 8 inches apart, said head pipes to be made continuous, by having a wrought-iron collar securely fastened on the end of each length of pipe into which the next length may be inserted, both head pipes to be held in place by means of heavy wrought-iron straps bolted to each stanchion by four five-eighths inch bolts, the lower head pipe being fitted with movable clamps, holding a ring of suitable size, to which cattle may be tied, said clamps to be set at the proper distance apart, in accordance with the regulations, and fastened to the pipe with screws.

¹ See p. 348.

DIVISION PIPES.

In place of the two 8-inch vertical shifting boards between each pen of four beasts, four wrought-iron pipes not less than 2 inches in diameter may be used, placed 8 inches apart, said pipes to be set in sockets above and below and fastened by means of five-eighths inch bolts.

CHAS. W. DABNEY, Jr., *Acting Secretary.*

MODIFICATION OF REGULATIONS RELATING TO MEAT INSPECTION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., December 21, 1894.

To inspectors in charge of the work of meat inspection:

The regulations of this Department of March 25, 1891,¹ concerning the inspection of live stock and their products, are hereby modified as to paragraph 3, section 9, which will read hereafter as follows:

"Each and every package to be shipped from said establishment to any foreign country must have printed or stenciled on the side or on the top, by the packer or exporter, the following:

"FOR EXPORT.

"(a) Official number of establishment.

"(b) Number of pieces or pounds.

"(c) Trademark."

In case said package is for transportation to some other State or Territory or the District of Columbia, in place of the words "For export," the words "Inter-state trade" shall be substituted.

J. STERLING MORTON, *Secretary.*

CERTIFICATE ACCOMPANYING LIVE STOCK TO FRANCE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., December 28, 1894.

To inspectors of live stock at ports of export and others:

You are hereby notified of the following regulations promulgated by the French Government concerning the admission of live stock into that country, viz:

All animals of the ovine, bovine, caprine, and porcine species imported into France from the United States shall be accompanied with a certificate from a veterinary inspector of the U. S. Department of Agriculture located in the State wherein raised, stating that the animals were in good health at time of inspection, and had not been exposed to any contagious diseases for three months prior to date of shipment, and if there is no veterinary inspector of the Department of Agriculture in the State wherein said animals are raised, a certificate as above may be furnished by the State authorities. A certificate also will be required from the veterinary inspector of this Department, at the port of export, showing that the animals were in good health at the time of exportation.

J. STERLING MORTON, *Secretary.*

REMOVAL OF GOVERNMENT PROPERTY.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 5, 1895.

To inspectors of the Bureau of Animal Industry:

No Government property shall be removed from the offices or buildings under your control, except as needed in current official use, without written authority

from you, and then only for official use and upon a receipt stating the condition of the said property, and that on demand it will be returned in good order. In the event of loss or destruction of the said property the facts shall be at once reported to the chief of the Bureau, and in case of negligence the said property shall be promptly replaced.

Inspectors will be held personally responsible for the care and preservation of all official property under their control.

Inventories of all Government property, including a statement of its condition, will, as heretofore, be promptly forwarded to the Department at the end of each quarter.

J. STERLING MORTON, *Secretary.*

REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 5, 1895.

To the managers and agents of railroad and transportation companies of the United States, stockmen, and others:

In accordance with section 7 of the act of Congress approved May 29, 1884,¹ entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," and of the act of Congress approved August 8, 1894, making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1895, you are hereby notified that a contagious and infectious disease known as splenic, or Southern, fever exists among cattle in the following-described area:

All that country lying east and south of a line commencing at the extreme western point of the county of Contra Costa, State of California; thence in an easterly direction along the northern boundaries of Contra Costa and San Joaquin counties to the western boundary of Amador County; thence north along the western boundary of Amador County to the southwestern corner of Eldorado County; thence east along the southern boundary of Eldorado County to the boundary line of the State of California; thence southeasterly along the eastern boundary of California to the western boundary of Arizona; thence south along the western boundary of Arizona to the southwestern corner of Arizona; thence easterly along the southern boundaries of Arizona and New Mexico to the Rio Grande River; thence southeasterly along the Rio Grande River to the southwestern corner of the county of Foley, State of Texas, continuing along the Rio Grande River in a northeasterly direction to the southwestern corner of the county of Pecos; thence following the western boundary of Pecos County to the southeast corner of Reeves County; thence following the boundary line between the counties of Pecos and Reeves to the Pecos River; thence southeasterly following the said Pecos River to the northwest corner of Crockett County; thence easterly along the northern boundaries of Crockett and Schleicher counties to the southeastern corner of Irion County; thence northerly along the eastern boundary of Irion County to the northeast corner of said county; thence northerly to the southern boundary of Coke County; thence westerly to the southwestern corner of Coke County; thence northerly along the western boundary of Coke County to the southern boundary of Mitchell County; thence easterly to the southeastern corner of Mitchell County; thence northerly along the western boundary of Nolan County to the northwest corner of Nolan County; thence easterly along the northern boundary of said county to the southwestern corner of Jones County; thence northerly along the western boundary of Jones County to the southern boundary of Stonewall County; thence easterly along the northern boundaries of Jones and Shackelford counties to the southwestern corner of Throckmorton County; thence northerly along the western boundaries of Throckmorton, Baylor, and Wilbarger counties to the Red River; continuing along the Red River in a southeasterly direction to the southeast corner of the county of Greer, Territory of Oklahoma; thence northerly following the course of the North Fork of the Red River to its intersection with the southern boundary line of Roger Mills County; thence easterly along the southern boundary of Roger Mills and Washita counties to the southeastern corner of Washita County; thence northerly along the eastern boundary of Washita County to the northeast corner of said

¹ See Report of Bureau for 1884, p. 473.

county; continuing in a northerly direction along the eastern boundary of the county of G to the southwestern corner of the county of Blaine; thence easterly along the southern boundary of Blaine County to the southeast corner of said county; thence north on the eastern boundary of said county to the northwest corner of Canadian County; thence east on the northern boundary of said county to the northeast corner of said county; thence north along the eastern boundary of Kingfisher County to the northeastern corner of said county; thence east along the southern boundary of O County to the southeast corner of said county; thence north along the eastern boundary of O County to the northeast corner of said county; thence east along the southern boundary of K County to the west line of the Ponca Indian Reservation; thence north on the west line of said reservation to the northwest corner of said reservation; thence east along the northern boundary of the Ponca Reservation to the Arkansas River; thence in a northerly direction following the course of said river to its intersection with the 37th parallel of north latitude at the southern boundary line of Kansas; thence east along the southern boundary of the State of Kansas to the southwest corner of Cherokee County, State of Kansas; thence northerly along the western boundary of the county of Cherokee to the northwest corner of said county; thence easterly along the northern boundary of said county to the State of Missouri; thence easterly along the northern boundary of the county of Jasper, in the State of Missouri, to the northeast corner of said county; of thence southerly along the eastern boundary of the counties of Jasper and Newton, in said State, to the southeast corner of Newton County; thence westwardly along the southern boundary of the county of Newton to the eastern boundary line of Indian Territory; thence southerly along the eastern boundary of the Indian Territory to the southwestern corner of Washington County, State of Arkansas; thence easterly along the southern boundaries of the counties of Washington, Madison, Newton, Searcy, and Stone to the western boundary of Independence County; thence southerly along the western boundary of Independence County to the southwest corner of Independence County; thence easterly along the southern boundary of Independence County to the southeast corner of Independence County; thence northerly along the eastern boundary of said county to the northeast corner of said county; thence easterly along the southern boundary of Lawrence County to the southeast corner of said county; thence northerly along the eastern boundary of said county to the southwestern corner of Greene County; thence easterly along the southern boundary of Greene County to the southern boundary of the State of Missouri, and along said southern boundary of the State of Missouri to the Mississippi River; thence southerly along the Mississippi River to the northwestern corner of the county of Shelby, State of Tennessee; thence along the northern boundary of the county of Shelby to the northeast corner of said county; thence northerly along the western boundary of Fayette County to the northwest corner of Fayette County; thence easterly along the northern boundary of Fayette County to the northeast corner of said county; thence northerly along the western boundary of Hardeman County to the northwest corner of said county; thence easterly along the southern boundary of Haywood County to the southeast corner of said county; thence northerly along the eastern boundary of Haywood County to the northeast corner of said county; thence in a northeasterly direction along the western boundary of Madison County to the northwestern corner of said county; thence easterly along the northern boundary of said county to the northeast corner of said county; thence northerly along the western boundary of Henderson County to the northwest corner of said county; thence easterly along the northern boundary of said county to the northeast corner of said county; thence northerly along the western boundary of Decatur County to the northwest corner of said county; thence easterly along the northern boundary of said county to the Tennessee River; thence following the Tennessee River in a southerly direction to the southwest corner of the county of Perry; thence east along the southern boundary of Perry County to the southeast corner of said county; thence easterly along the northern boundary of Wayne County to the northeastern corner of said county; thence southerly along the eastern boundary of Wayne County to the boundary line of the State of Tennessee; thence easterly along the southern boundary of the State of Tennessee to the western boundary of the State of North Carolina; thence along the southern boundaries of the counties of Cherokee, Clay, Macon, Jackson, and Transylvania, State of North Carolina, to the southeast corner of the county of Transylvania; thence northwesterly along the eastern boundary of Transylvania County to the southwest corner of the county of Buncombe; thence in a northeasterly direction following the Blue Ridge Mountains to the southwestern corner of the county of Amherst, State of Virginia; thence southeasterly along the southern boundary of the county of Amherst to the western boundary

of the county of Appomattox; thence in a northeasterly direction along the western boundaries of the counties of Appomattox, Buckingham, Fluvanna, and Louisa to the southern boundary of the county of Orange; thence easterly along the southern boundary of the county of Orange to the western boundary of the county of Spottsylvania; thence in a southeasterly direction along the western boundaries of the counties of Spottsylvania and Caroline to the northwestern corner of King William County; thence in a northeasterly direction along the southern boundary of the county of Caroline to the eastern boundary of said county; thence southerly along the eastern boundary of King and Queen County to the southwest corner of Essex County; thence along the southern boundaries of Essex and Richmond counties to the southeast corner of Richmond County; thence northerly along the eastern boundary of said county to the northeast corner of Northumberland County; thence in a northeasterly direction along the northern boundary of said county to the Potomac River; thence following the Potomac River southerly to the Chesapeake Bay; thence easterly along the southern boundary of the State of Maryland to the Atlantic Ocean.

From the 15th day of February to the 1st day of December, 1895, no cattle are to be transported from said area to any portion of the United States north or west of the above-described line, except by rail for immediate slaughter, and when so transported the following regulations must be observed:

1. When any cattle in course of transportation from said area are unloaded north or west of this line to be fed or watered, the places where said cattle are to be so fed or watered shall be set apart and no other cattle shall be admitted thereto.

2. On unloading said cattle at their points of destination, pens shall be set apart to receive them, and no other cattle shall be admitted to said pens; and the regulations relating to the movement of Texas cattle, prescribed by the cattle sanitary officers of the State where unloaded, shall be carefully observed. The cars that have carried said stock shall be cleansed and disinfected before they are again used to transport, store, or shelter animals or merchandise.

3. All cars carrying cattle from said area shall bear placards stating that said cars contain Southern cattle, and each of the waybills of said shipments shall have a note upon its face with a similar statement. Whenever any cattle have come from said area and shall be reshipped from any point at which they have been unloaded to other points of destination, the cars carrying said animals shall bear similar placards with like statements, and the waybills be so stamped. At whatever point these cattle shall be unloaded they shall be placed in separate pens to which no other cattle shall be admitted.

4. The cars used to transport such animals, and the pens in which they are fed and watered, and the pens set apart for their reception at points of destination, shall be disinfected in the following manner:

(a) Remove all litter and manure. This litter and manure may be disinfected by mixing it with lime or diluted sulphuric acid, or, if not disinfected, it may be stored where no cattle can come into contact with it until after December 1.

(b) Wash the cars and the feeding and watering troughs with water until clean.

(c) Saturate the walls and floors of the cars and fencing, troughs, and chutes of the pens with a solution made by dissolving 4 ounces of chloride of lime to each gallon of water. Or disinfect the cars with a jet of steam under a pressure of not less than 50 pounds to the square inch.

5. It is further expressly provided that cattle which have been in the counties of Wilbarger, Baylor, Throckmorton, Shackelford, Jones, Nolan, Coke, and the northern half of Pecos County, State of Texas, since January 1, 1895, and have not come into contact with any cattle brought into said counties from any other counties in the infected area since that date, may be moved from the said counties by rail into the States of Colorado, Wyoming, Montana, North Dakota, and South Dakota, in accordance with the regulations made by said States for the admission of Southern cattle thereto: Provided—

(1) That a permit shall first be obtained from the Secretary of Agriculture for such movement. The application for such permit must state the name of the county in which said cattle are located, the name of the owner of said cattle, the number of cattle to be moved, and the route over which said cattle are to be transported to the above-named States.

(2) That said permit shall be forwarded to the inspector of the Department stationed at Kansas City, Mo., who will detail an officer to inspect said cattle and ascertain whether they are entitled to be shipped under the provisions of this order, and who, upon finding that the same are so entitled, will countersign said

permit and supervise the movement of said cattle to point of shipment. The said officer before delivering such permit shall obtain affidavits of the owner or manager of the cattle and of two reputable and disinterested persons, showing that they are acquainted with the cattle sought to be shipped, and that they have known said cattle since January 1, 1893, and that said cattle have been kept in the territory described above and have not come into contact with any other Southern cattle. These affidavits will be forwarded by him to the Department of Agriculture.

(3) That cattle from said area shall go into said States only for slaughter or grazing, and shall on no account be reshipped from said States into any other State or Territory of the United States before December 1, 1895.

(4) That all cars which have carried cattle from said area shall, upon unloading, be at once cleaned and disinfected in the manner provided by these regulations.

(5) That the State authorities of the States of Colorado, Wyoming, Montana, North Dakota, and South Dakota agree to enforce these provisions.

The losses which formerly occurred to the owners of susceptible cattle, both in the interstate and export trade, by the contraction of this disease from exposure in unclean and infected cars and pens, and by means of the manure carried in unclean cars from place to place, became a matter of grave and serious concern to the cattle industry of the United States until this danger was removed by the inspection of this Department. It is absolutely essential, therefore, that this cattle industry should continue to be protected as far as possible by separating the dangerous cattle and by the adoption of efficient methods of disinfection.

Inspectors will be instructed to see that disinfection is properly done, and it is expected that transportation companies will promptly put into operation the above methods.

J. STERLING MORTON, *Secretary*.

REGULATIONS FOR THE INSPECTION AND QUARANTINE OF NEAT CATTLE, SHEEP, AND OTHER RUMINANTS, AND SWINE IMPORTED INTO THE UNITED STATES.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 7, 1895.

In pursuance of sections 7, 8, and 10 of the act of Congress entitled "An act providing for the inspection of meats for exportation, and prohibiting the importation of adulterated articles of food or drink, and authorizing the President to make proclamation in certain cases, and for other purposes," approved August 30, 1890,¹ the following regulations are hereby prescribed for the inspection and quarantine of neat cattle, sheep, and other ruminants, and swine imported into the United States, and all previous regulations prescribed for such inspection and quarantine are hereby rescinded:²

1. With the approval of the Secretary of the Treasury, the following named ports are hereby designated as quarantine stations, and all cattle, sheep, and other ruminants, and swine imported into the United States must be entered through said ports, viz: On the Atlantic seaboard, the ports of Boston, New York, and Baltimore; on the Pacific seaboard, San Diego; along the boundary between the United States and Mexico, Nogales, Paso del Norte, Eagle Pass, and Laredo; and along the border or boundary line between the United States and British Columbia and Canada, through the customs ports in the collection districts of Aroostook and Bangor, Me.; Vermont, Vt.; Buffalo Creek and Oswegatchie, N. Y.; Detroit and Port Huron, Mich.; Minnesota, Minn.; and Puget Sound, Wash.

2. The word "animals," when used in these regulations, refers to and includes all or any of the following kinds: Neat cattle, sheep, and other ruminants, and swine. The words "contagious diseases," when used in these regulations, includes and applies to all or any of the following diseases: Anthrax in cattle, sheep, goats, or swine; contagious pleuro-pneumonia in cattle; Texas, or splenic, fever in cattle; tuberculosis in cattle; foot-and-mouth disease in cattle, sheep, goats, and swine; rinderpest in cattle and sheep; sheep-pox, foot-rot, and scab in sheep; hog cholera, swine plague, and erysipelas in swine.

3. All cattle, sheep, and other ruminants imported into the United States from any part of the world shall be accompanied with a certificate from the local authority of the district in which said animals have been for one year next preceding the date of shipment, stating that no contagious pleuro-pneumonia,

¹ See p. 335.

² See modification on p. 376, and amended on p. 395.

foot-and-mouth disease, or rinderpest has existed in said district for the past year. And all swine imported into the United States from any part of the world shall be accompanied with a similar certificate relating to the existence of foot-and-mouth disease, hog cholera, and erysipelas. All such animals shall also be accompanied with an affidavit by the owner from whom the importer has purchased them, stating that said animals have been in the district where purchased for one year next preceding the date of sale, and that none of the above-mentioned diseases have existed among them, nor among any animals of the kind with which they have come in contact, for one year last past, and that no inoculation has been practiced among said animals for the past two years. Also by an affidavit from the importer or his agent supervising the shipment, stating that they have not passed through any district infected with contagious diseases affecting said kind of animals; that they have not been exposed in any possible manner to the contagion of any of said contagious diseases, and that the animals, when not driven, have been shipped in clean and disinfected cars and vessels direct from the farm where purchased.

4. The foregoing certificate and affidavits must accompany said animals and be presented to the collector of customs at the port of entry, and by him be delivered to the inspector of the Bureau of Animal Industry stationed at said port, to allow them to be imported into the United States.

5. All neat cattle imported into the United States from any part of the world except Mexico, Central and South America, shall be subject to a quarantine of ninety days, counting from date of arrival at the quarantine station. All sheep and other ruminants, and swine, from any part of the world except North, Central, and South America, shall be subject to a quarantine of fifteen days, counting from date of arrival at the quarantine station.

6. Any person contemplating the importation of animals from any part of the world except North, Central, and South America, or of cattle from the Dominion of Canada, must first obtain from the Secretary of Agriculture two permits, one stating the number and kind of animals to be imported, the port and probable date of shipment, which will entitle them to clearance papers on presentation to the American consul at said port of shipment; the other stating the port at which said animals are to be landed and quarantined, and the approximate date of their arrival, and this will assure the reception of the number and kind specified therein at the port and quarantine station named at the date prescribed for their arrival, or at any time during three weeks immediately following, after which the permit will be void. These permits shall in no case be available at any port other than the one mentioned therein. Permits must be in the name of the owner of or agent for any one lot of animals. When more persons than one own a lot of animals for which permits have been issued, a release from quarantine will be given each owner for the number and kind he may own, and this release will be a certificate of fulfillment of quarantine regulations. Permits will be issued to quarantine at such ports as the importer may elect, so far as facilities exist at such port, but in no case will permits for importation at any port be granted in excess of the accommodations of the Government quarantine station at such port. United States consuls should give clearance papers or certificates for animals from their districts intended for exportation to the United States only upon presentation of permits as above provided, with dates of probable arrival and destination corresponding with said permits, and in no case for a number in excess of that mentioned therein. When such shipments originate in the interior of a foreign country, these permits should be submitted to the consul of that district and through the forwarding agent to the consul at the port of embarkation.

7. Cattle and sheep from the Dominion of Canada for export from the United States may be entered at the ports of Island Pond and Beecher Falls, Vt., in bond for Portland, Me., for export from the latter port only, provided said animals are accompanied by the health certificate and affidavits required by section 3, and provided further that suitable pens are furnished by the railroad companies at the ports of entry for their unloading and proper inspection.

8. All animals imported into the United States shall be carefully inspected by an inspector of the Bureau of Animal Industry, and all animals found to be free from disease and not to have been exposed to any contagious disease shall be admitted into the United States subject to the provisions for quarantine as established in paragraph 5. Whenever any animal is found to be affected with a contagious disease, or to have been exposed to such disease, said animal, and all animals that have been in contact with or exposed to said animal, will be placed in quarantine, and the inspector quarantining the same shall report at once to the Chief of the Bureau of Animal Industry, who will direct whether or not said animals quarantined shall be appraised and slaughtered, as provided by section 8 of

the act under which these regulations are made. All animals quarantined by reason of disease or exposure to disease shall not be admitted to the established quarantine grounds, but shall be quarantined elsewhere, at the expense of the importer, or be dealt with in such manner as the Chief of the Bureau of Animal Industry shall determine.

9. In case of imported animals proving to be infected, or to have been exposed to infection, such portions of the cargo or the vessel on which they have arrived as have been exposed to these animals or their emanations shall be subjected, under the direction of the inspector of the Bureau of Animal Industry, to disinfection in such manner as may be considered by said inspector necessary before it can be landed.

10. No litter, fodder, or other aliment, nor any ropes, straps, chains, girths, blankets, poles, buckets, or other things used for or about the animals, and no manure shall be landed, excepting under such regulations as the inspector shall provide.

11. On moving animals from the ocean steamer to the quarantine grounds they shall not be unnecessarily passed over any highways, but must be placed on cars at the wharves or removed to the cars on a boat which is not used for conveying other animals. If such boat has carried animals within three months, it must be first cleaned and then disinfected under the supervision of the inspector, and after the conveyance of the imported animals the boat must be disinfected in the same manner before it may be again used for the conveyance of animals. When passage upon or across the public highway is unavoidable in the transportation of animals from the place of landing to the quarantine grounds, it must be under such careful supervision and restrictions as the inspector may, in special cases, direct.

12. The banks and chutes used for loading and unloading imported animals shall be reserved for such cattle, or shall be cleansed and disinfected as above before being used for such imported cattle.

13. The railway cars used in the transportation of animals to the quarantine grounds shall be either cars reserved for this exclusive use, or box cars not otherwise employed in the transportation of animals or their fresh products, and after each journey with animals to the quarantine grounds they shall be disinfected by thorough cleansing and disinfection under the direction of the inspector.

14. While animals are arriving at the quarantine stations, or leaving them, all quarantined stock in the yards adjoining the alleyways through which they must pass shall be rigidly confined to their sheds. Animals arriving by the same ship may be quarantined together in one yard and shed, but those coming on different ships shall in all cases be placed in separate yards.

15. The gates of all yards of quarantine stations shall be kept locked, except when cattle are entering or leaving quarantine.

16. The attendants on animals in particular yards are forbidden to enter other yards and buildings, unless such are occupied by stock of the same shipment with those under their special care. No dogs, cats, or other animals, except those necessarily present, shall be allowed in the quarantine grounds.

17. The allotment of yards shall be under the direction of the inspector of the port, who shall keep a register of the animals entered, with description, name of owner, name of vessel in which imported, date of arrival and release, and other important particulars.

18. The inspector shall see that water is regularly furnished to the stock, and the manure removed daily, and that the prescribed rules of the station are enforced.

19. Food and attendance must be provided by the owners of the stock quarantined. Employees of such owners shall keep the sheds and yards clean, to the satisfaction of the inspector.

20. "Smoking" is strictly forbidden within any quarantine inclosure.

21. No visitor shall be admitted to the quarantine station without special written permission from the inspector. Butchers, cattle dealers, and their employees are especially excluded.

22. No public sale shall be allowed within the quarantine grounds.

23. The inspector shall, in his daily rounds, as far as possible, take the temperature of each animal, commencing with the herds that have been longest in quarantine, and ending with the most recent arrivals, and shall record such temperatures on lists kept for the purpose. In passing from one herd to another he shall invariably wash his thermometer and hands in a weak solution (1 to 100) of carbolic acid.

24. In case of the appearance of any disease that is diagnosed to be of a contagious nature, the inspector shall notify the Chief of the Bureau of Animal Industry,

who shall visit the station personally or send an inspector, and on the confirmation of the diagnosis the herd shall be disposed of according to the gravity of the affection.

25. The yard and shed in which such disease shall have appeared shall be subject to a thorough disinfection. Litter and fodder shall be burned. Sheds, utensils, and other appliances shall be disinfected as the inspector may direct. The yard, fence, and manure box shall be freely sprinkled with a strong solution of chloride of lime. The flooring of the shed shall be lifted and the whole shall be left open to the air and unoccupied for three months.

26. In case of the appearance of any contagious disease the infected herd shall be rigidly confined to its sheds, where disinfectants shall be freely used, and the attendants shall be forbidden all intercourse with the attendants in other yards, and with persons outside the quarantine grounds.

J. STERLING MORTON, *Secretary.*

[The designation of the ports named in the foregoing regulations as quarantine stations was approved by the Secretary of the Treasury on the 16th day of October, 1890, as provided by section 8 of the act of Congress, approved August 30, 1890, providing for inspection of meats and animals.]

REGULATIONS FOR THE INSPECTION AND QUARANTINE OF NEAT CATTLE, SHEEP, AND OTHER RUMINANTS, AND SWINE IMPORTED INTO THE UNITED STATES.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 11, 1895.

In pursuance of sections 7, 8, and 10 of the act of Congress entitled "An act providing for the inspection of meats for exportation, and prohibiting the importation of adulterated articles of food or drink, and authorizing the President to make proclamation in certain cases, and for other purposes," approved August 30, 1890,¹ the following regulations are hereby prescribed for the inspection and quarantine of neat cattle, sheep, and other ruminants, and swine imported into the United States, and all previous regulations prescribed for such inspection and quarantine are hereby rescinded:²

1. With the approval of the Secretary of the Treasury, the following-named ports are hereby designated as quarantine stations, and all cattle, sheep, and other ruminants, and swine imported into the United States, must be entered through said ports, viz: On the Atlantic seaboard, the ports of Boston, New York, and Baltimore; on the Pacific seaboard, San Diego, Cal.; along the boundary between the United States and Mexico, Nogales, Ariz.; El Paso, Eagle Pass, and Laredo, Tex.; along the border or boundary line between the United States and British Columbia and Canada, through the custom ports of Vanceboro and Houlton, Me.; Richford, Newport, St. Albans, Island Pond, and Beecher Falls, Vt.; Ogdensburg, Rouse Point, Buffalo, Charlotte, and Suspension Bridge, N. Y.; Detroit and Port Huron, Mich.; Minnesota, Minn.; and Puget Sound, Wash.

2. The word "animals," when used in these regulations, refers to and includes all or any of the following kinds: Neat cattle, sheep, and other ruminants, and swine. The words "contagious diseases," when used in these regulations, includes and applies to all or any of the following diseases: Anthrax in cattle, sheep, goats, or swine; contagious pleuro-pneumonia in cattle; Texas, or splenic, fever in cattle; tuberculosis in cattle; foot-and-mouth disease in cattle, sheep, goats, and swine; rinderpest in cattle and sheep; sheep pox, foot rot, and scab in sheep; hog cholera, swine plague, and erysipelas in swine.

3. All cattle, sheep, and other ruminants imported into the United States from any part of the world shall be accompanied with a certificate from the local authority of the district in which said animals have been for one year next preceding the date of shipment, stating that no contagious pleuro-pneumonia, foot-and-mouth disease, or rinderpest has existed in said district for the past year. And all swine imported into the United States from any part of the world shall be accompanied with a similar certificate relating to the existence of foot-and-mouth disease, hog cholera, and erysipelas. All such animals shall also be accompanied with an affidavit by the owner from whom the importer has purchased them, stating

¹ See p. 335.

² See modification on pp. 390, 394.

that said animals have been in the district where purchased for one year next preceding the date of sale, and that none of the above-mentioned diseases have existed among them, nor among any animals of the kind with which they have come in contact, for one year last past, and that no inoculation has been practiced among said animals for the past two years. Also by an affidavit from the importer or his agent supervising the shipment, stating that they have not passed through any district infected with contagious diseases affecting said kind of animals; that they have not been exposed in any possible manner to the contagion of any of said contagious diseases, and that the animals, when not driven, have been shipped in clean and disinfected cars and vessels direct from the farm where purchased.

4. The foregoing certificate and affidavits must accompany said animals and be presented to the collector of customs at the port of entry, and by him be delivered to the inspector of the Bureau of Animal Industry stationed at said port, to allow them to be imported into the United States.

5. All neat cattle imported into the United States from any part of the world except Mexico, Central and South America, shall be subject to a quarantine of ninety days, counting from date of arrival at the quarantine station. All sheep and other ruminants, and swine, from any part of the world except North, Central, and South America, shall be subject to a quarantine of fifteen days, counting from date of arrival at the quarantine station.

6. Any person contemplating the importation of animals from any part of the world except North, Central, and South America, or of cattle from the Dominion of Canada, must first obtain from the Secretary of Agriculture two permits, one stating the number and kind of animals to be imported, the port and probable date of shipment, which will entitle them to clearance papers on presentation to the American consul at said port of shipment; the other, stating the port at which said animals are to be landed and quarantined, and the approximate date of their arrival, and this will assure the reception of the number and kind specified therein at the port and quarantine station named, at the date prescribed for their arrival, or at any time during three weeks immediately following, after which the permit will be void. These permits shall in no case be available at any port other than the one mentioned therein. Permits must be in the name of the owner of, or agent for, any one lot of animals. When more persons than one own a lot of animals for which permits have been issued, a release from quarantine will be given each owner for the number and kind he may own, and this release will be a certificate of fulfillment of quarantine regulations. Permits will be issued to quarantine at such ports as the importer may elect, so far as facilities exist at such port, but in no case will permits for importation at any port be granted in excess of the accommodations of the Government quarantine station at such port. United States consuls should give clearance papers or certificates for animals from their districts intended for exportation to the United States only upon presentation of permits as above provided, with dates of probable arrival and destination corresponding with said permits, and in no case for a number in excess of that mentioned therein. When such shipments originate in the interior of a foreign country, these permits should be submitted to the consul of that district and through the forwarding agent to the consul at the port of embarkation.

7. Cattle and sheep from the Dominion of Canada for export from the United States may be entered at the ports of Island Pond and Beecher Falls, Vt., in bond for Portland, Me., for export from the latter port only, provided said animals are accompanied by the health certificate and affidavits required by section 3, and provided, further, that suitable pens are furnished by the railroad companies at the ports of entry for their unloading and proper inspection.

8. All animals imported into the United States shall be carefully inspected by an inspector of the Bureau of Animal Industry, and all animals found to be free from disease and not to have been exposed to any contagious disease shall be admitted into the United States, subject to the provisions for quarantine as established in paragraph 5. Whenever any animal is found to be affected with a contagious disease or to have been exposed to such disease, said animal, and all animals that have been in contact with or exposed to said animal, will be placed in quarantine, and the inspector quarantining the same shall report at once to the Chief of the Bureau of Animal Industry, who will direct whether or not said animals quarantined shall be appraised and slaughtered, as provided by section 8 of the act under which these regulations are made. All animals quarantined by reason of disease or exposure to disease shall not be admitted to the established quarantine grounds, but shall be quarantined elsewhere at the expense of the importer or be dealt with in such a manner as the Chief of the Bureau of Animal Industry shall determine.

9. In case of imported animals proving to be infected or to have been exposed

to infection, such portions of the cargo or the vessel on which they have arrived as have been exposed to these animals or their emanations shall be subjected, under the direction of the inspector of the Bureau of Animal Industry, to disinfection in such manner as may be considered by said inspector necessary before it can be landed.

10. No litter, fodder, or other aliment, nor any ropes, straps, chains, girths, blankets, poles, buckets, or other things used for or about the animals, and no manure, shall be landed, excepting under such regulations as the inspector shall provide.

11. On moving animals from the ocean steamer to the quarantine grounds they shall not be unnecessarily passed over any highways, but must be placed on cars at the wharves or removed to the cars on a boat which is not used for conveying other animals. If such boat has carried animals within three months it must be first cleaned and then disinfected under the supervision of the inspector, and after the conveyance of the imported animals the boat must be disinfected in the same manner before it may be again used for the conveyance of animals. When passage upon or across the public highway is unavoidable in the transportation of animals from the place of landing to the quarantine grounds, it must be under such careful supervision and restrictions as the inspector may in special cases direct.

12. The banks and chutes used for loading and unloading imported animals shall be reserved for such cattle, or shall be cleansed and disinfected as above before being used for such imported cattle.

13. The railway cars used in the transportation of animals to the quarantine grounds shall be either cars reserved for this exclusive use or box cars not otherwise employed in the transportation of animals or their fresh products, and after each journey with animals to the quarantine grounds they shall be disinfected by thorough cleansing and disinfection under the direction of the inspector.

14. While animals are arriving at the quarantine stations or leaving them all quarantined stock in the yards adjoining the alleyways through which they must pass shall be rigidly confined to their sheds. Animals arriving by the same ship may be quarantined together in one yard and shed, but those coming on different ships shall in all cases be placed in separate yards.

15. The gates of all yards of quarantine stations shall be kept locked, except when cattle are entering or leaving quarantine.

16. The attendants on animals in particular yards are forbidden to enter other yards and buildings, unless such are occupied by stock of the same shipment with those under their special care. No dogs, cats, or other animals, except those necessarily present, shall be allowed in the quarantine grounds.

17. The allotment of yards shall be under the direction of the inspector of the port, who shall keep a register of animals entered, with description, name of owner, name of vessel in which imported, date of arrival and release, and other important particulars.

18. The inspector shall see that water is regularly furnished to the stock and the manure removed daily, and that the prescribed rules of the station are enforced.

19. Food and attendance must be provided by the owners of the stock quarantined. Employees of such owners shall keep the sheds and yards clean, to the satisfaction of the inspector.

20. Smoking is strictly forbidden within any quarantine inclosure.

21. No visitor shall be admitted to the quarantine station without special written permission from the inspector. Butchers, cattle dealers, and their employees are especially excluded.

22. No public sale shall be allowed within the quarantine grounds.

23. The inspector shall, in his daily rounds, as far as possible, take the temperature of each animal, commencing with the herds that have been longest in quarantine and ending with the most recent arrivals, and shall record such temperatures on lists kept for the purpose. In passing from one herd to another he shall invariably wash his thermometer and hands in a weak solution (1 to 100) of carbolic acid.

24. In case of the appearance of any disease that is diagnosed to be of a contagious nature, the inspector shall notify the Chief of the Bureau of Animal Industry, who shall visit the station personally or send an inspector, and on the confirmation of the diagnosis the herd shall be disposed of according to the gravity of the affection.

25. The yard and shed in which such disease shall have appeared shall be subject to a thorough disinfection. Litter and fodder shall be burned. Sheds, utensils, and other appliances shall be disinfected as the inspector may direct. The

yard, fence, and manure box shall be freely sprinkled with a strong solution of chloride of lime. The flooring of the shed shall be lifted and the whole shall be left open to the air and unoccupied for three months.

26. In case of the appearance of any contagious disease the infected herd shall be rigidly confined to its sheds, where disinfectants shall be freely used, and the attendants shall be forbidden all intercourse with the attendants in other yards and with persons outside the quarantine grounds.

J. STERLING MORTON, *Secretary.*

[The designation of the ports named in the foregoing regulations as quarantine stations was approved by the Secretary of the Treasury on the 16th day of October, 1890, as provided by section 8 of the act of Congress approved August 30, 1890, providing for inspection of meats and animals.]

REGULATIONS FOR THE SAFE TRANSPORT OF CATTLE FROM THE UNITED STATES TO FOREIGN COUNTRIES.¹

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 18, 1895.

Pursuant to the authority vested in the Secretary of Agriculture by virtue of the act of Congress approved March 3, 1891,² entitled "An act to provide for the safe transport and humane treatment of export cattle from the United States to foreign countries, and for other purposes," the following regulations are hereby prescribed for vessels engaged in the transportation of cattle from the United States to foreign countries, and all previous regulations for similar export transportation are hereby rescinded:

1. Upon receipt of information from owners, agents, or master of any vessel desiring to transport cattle from any port in the United States, the Secretary of Agriculture will direct the inspector in charge of the port from which said vessel is to clear to examine said vessel, and if the same has complied with the regulations hereinafter prescribed a clearance will be authorized by the inspector.

SPACE.

2. Cattle or sheep must not be carried on any part of the vessel where they will interfere with the proper management of the vessel, or with the efficient working of the necessary lifeboats, or with the requisite ventilation of the vessel. Cattle must have 6 feet vertical space on all decks free of all obstructions.

3. Cattle carried on the upper or spar deck must be allowed a space 2 feet 6 inches in width by 8 feet in depth per head. Cattle loaded between decks must be allowed a space of 2 feet 8 inches in width by 8 feet in depth, except in the case of regular cattle ships with satisfactory ventilation, which may fit with an allowance of 2 feet 6 inches in width. No more than four head of cattle will be allowed in each pen, except at the end of a row, where five may be allowed together; provided, however, that cattle under 1,000 pounds in weight may be allowed a width of 2 feet 3 inches.

4. Vessels will be allowed to carry three deck loads of cattle, but where it is desired to carry cattle on the lower or steerage deck, it must in all cases be fitted at 2 feet 8 inches by 8 feet per head, and no cattle allowed upon hatches. Special permission for carrying cattle on steerage deck must be obtained from the inspector, which will be granted in cases where said deck is provided with sufficient ventilation, as herein prescribed.

UPPER DECKS.

5. No cattle or sheep shall be allowed on the poop deck or within 20 feet of the breakwater on the spar deck between the 1st of October and the 1st of April. If cattle are carried on the bridge deck, proper runways shall be provided for loading and unloading.

(a) No cattle shall be carried on the upper decks where the outside rails measure less than 3 feet in height from the deck, nor from October 1 to April 1 upon steamers having free boards which measure less than 5 feet 6 inches vertical space (winter mark).

¹ Amended by order on p. 408.

² See p. 345.

(b) When cattle are carried upon the upper decks strong breakwaters shall be erected at each end and on both sides. Permanent fittings may be constructed either of iron or wood, as hereinafter provided.

UPPER-DECK FITTINGS.

6. *Stanchions, wooden.*—Stanchions, at least 6 feet 4 inches high, must be of good sound spruce or yellow pine lumber, 4 by 6 inches, placed at proper distances from centers, against the ship's rail and inside stanchions, in their proper place directly in line with outboard stanchions, to be set up so that the 6-inch way of the stanchions shall set fore and aft. A proper tenon shall be cut on the head of the same to receive the thwart-ship beam; the tenon not to be less than 3 inches in length and the shoulder not less than $2\frac{1}{2}$ inches on each side of the stanchion, thus leaving the tenon $1\frac{1}{2}$ inches thick. A piece of 2 by 3 inches or 2-inch plank shall be fastened to the outside of stanchion and run up to underneath rail to chock stanchion down and prevent lifting when beam is sprung to crown of deck. Open-rail ships shall be blocked out on backs of stanchions fair with the outside of rails to receive the outside of planking. Where upper-deck fittings are not permanent, the heels of outside stanchions shall be secured by a bracing of 2 by 3 inch sound lumber from the back of each stanchion to shear-streak or waterway, the heels of inside stanchions being properly braced from and to each other. Bulwark stanchions must also be extra stanchioned by raking shores running diagonally from the top of the stanchions to the deck.

(a) *Stanchions, iron.*—These may be used in place of wooden stanchions, and shall be not less than 2 inches in diameter, set in iron sockets above and below and fastened with five-eighths-inch bolts.

(b) *Hook bolts or clamps.*—Hook bolts or clamps must be made of five-eighths-inch wrought iron, with hook on outboard end and thread and nut on inboard end, to pass over and under rail and through outboard stanchion and set up on the inside of same with a nut. These bolts may be double or single. If double, then no thread or nut is necessary, but the stanchion will lie shipped through it, thus double hooking the rails. This will be found very useful where funnels or other deck fittings come in the way of beams passing from side to side of ship.

(c) *Beams.*—Beams must be of good, sound spruce or yellow pine lumber 3 by 6 inch, to run clear across the ship's beam where practicable. Should any house or deck fittings be in the way, then butt up closely to the same. These beams shall have a $1\frac{1}{4}$ by 4 inch mortise to receive the tenon of each and every stanchion, and to take the same crown as deck of ship by springing down to shoulder of outside stanchions, and to be properly pinned or nailed to tenon and wedged tightly afterwards. The mortises shall be cut not less than 6 inches from outside ends of beams and a piece nailed on outside of same and trimmed off fair with beam ends to prevent splitting.

(d) *Diagonal braces from stanchions to beams.*—Diagonal braces shall be fastened on each stanchion on both sides of same, running up to top side of beam and properly secured by well nailing to both stanchion and beam.

(e) *Headboards.*—Headboards shall be not less than 2 by 10 or 3 by 8 inches, of good, sound spruce or yellow pine lumber, and secured to every stanchion by five-eighths-inch screw bolts passing through same and set up on same with a nut. Where headboards butt on the stanchions a piece of iron one-fourth of an inch thick and 3 inches square shall be placed over the boards like the butt strap. These headboards can be placed on either side of the stanchion. All headboards shall have $1\frac{1}{4}$ -inch holes bored through them at proper distances to tie the animals.

(f) *Head pipes.*—In place of wooden headboards two wrought-iron pipes not less than 2 inches in diameter may be used, placed 8 inches apart. Said head pipes to be made continuous by having a wrought-iron threaded collar securely fastened on the end of each length of pipe into which the next length may be inserted or screwed. Both head pipes to be held in place by means of heavy wrought-iron straps, bolted to each stanchion by four five-eighths inch bolts, the lower head pipe being fitted with movable clamps, holding a ring of suitable size to which cattle may be tied. Said clamps to be set at the proper distance apart in accordance with the regulations, and fastened to the pipe with screws.

(g) *Footboards.*—Footboards shall be of the same material as headboards, properly nailed or bolted to stanchions on the inside of same.

(h) *Division boards.*—Division boards shall be of 2 by 8 inch sound spruce or yellow pine lumber, fitted so as to be removable at any time, and so arranged as to divide the animals into lots of four, thus making compartments for this number all over the vessel. These division boards shall be fitted perpendicularly.

(i) *Flooring.*—Where flooring is required it shall be of 1-inch spruce boards,

laid fore and aft on ships with wooden decks. Iron-decked ships shall be sheathed with 2-inch spruce or yellow pine, or with 1-inch spruce; but if 1-inch lumber is used, the footlocks shall be 3 by 4 inches, to be laid so that they will properly secure the 1-inch boards, thus preventing them from slipping, and at the same time acting as footlocks by showing a surface of 2 by 4 inches to correspond with the 2 by 3 inches. It is optional with the owners whether they permit sheathing to be used on their ships with wooden decks or whether they allow footlocks to be secured to the deck. But on iron decks it is absolutely necessary (if permanent footlocks are not down) to sheath them before putting down the footlocks in order to fasten same. Cement may be used instead of wood sheathing and footlocks molded in same. If the flooring is raised on any of the decks, it shall be not less than 2 inches thick, with scantlings 2 by 3 inches thick, laid athwartships on the deck, not over 18 inches apart, with 2-inch plank for flooring nailed to them.

(k) *Footlocks*.—Footlocks shall be of good sound spruce or yellow pine lumber or hard wood, size 2 by 3 inches or 3 by 4 inches laid fore and aft, placed 12 inches, 14 inches, 2 feet 2 inches, and 14 inches apart, the first one distant 12 inches from inside of footboard, filled in athwartships opposite each stanchion, properly secured to sheathing or deck, and secured by a batten of spruce or yellow pine 2 by 3 inches thick to go over all from stanchion to stanchion. When troughs are used, footlocks will be placed 17, 16, 22, and 16 inches apart.

(l) *Outside planking*.—All outside planking on open and closed railed ships must be properly laid fore and aft of ship and nailed to the backs of stanchions, as close as possible for the cold season, and for the warmer months the top course planking shall be left off fore and aft of ship, in order to allow a free circulation of air. Nothing less than 2-inch spruce or 1½-inch yellow pine is to be used for this purpose.

(m) *Planking of shelter deck to be erected on all exposed decks*.—The planks to form the shelter deck, which must be erected on all exposed decks, shall be laid with 2-inch sound spruce or yellow pine lumber sufficient to cover cattle. These planks shall be laid as closely as possible and well nailed to the beams, thus making a good deck from which to work the ship's gear.

(n) *Nails*.—No nails less than 20 penny shall be used in footlocks, or where 2-inch material is used. Twelve-penny nails can be used in 1½-inch plank or under.

UNDER-DECK FITTINGS.

(o) *Stanchions*.—Stanchions shall be at least 6 feet 4 inches high and of good sound spruce or yellow pine lumber, 4 by 6 inches, set up at proper distances from centers so that the 6-inch way of same shall stand fore and aft, and jammed in tight between the two decks, properly braced on head and from side to side of ship; this bracing shall be of 2 by 3 inch spruce or yellow pine, and be properly butted against each stanchion. Where it is found impracticable to run these braces across ship by reason of hatches, etc., coming in the way, they shall be well braced from hatch combings and from the obstruction which prevents running braces from side to side. The heads of these stanchions shall be braced fore and aft by 2 by 3 inch pieces well nailed on each stanchion and running fore and aft close up to the lower edge of the ship's beams, and butted at each end of compartment and against themselves, or chocked in underneath beam and well nailed to heads of stanchions. If upper and lower decks are wood, then the stanchions set up between decks may be secured by well cleating to each deck at heads and heels of same.

(p) *Headboards*.—Headboards shall be of the same dimensions and same lumber as those on the upper deck and fastened in the same manner, with 1½-inch holes bored at right distances to tie animals.

(q) *Footboards*.—Footboards shall be of the same dimensions and same lumber as those on the upper deck, and fastened in the same manner.

(r) *Division boards*.—Division boards shall be fitted perpendicularly, and arranged so that they divide the animals into pens of four, or at end of row into pens of five.

(s) *Flooring*.—Where ships have decks of wood, it shall be optional with owners whether they have boards put down to protect decks or whether they allow the footlocks to be nailed to the ship's deck. (Permanent footlocks may be put down.) If the decks are of iron, then wooden flooring must be laid either of 2-inch spruce with 2 by 3 inch foot locks, or of 1-inch spruce with 3 by 4 inch footlocks, same as provided for upper decks. Cement may also be used instead of wood flooring, molding the footlocks in their proper places between same.

(t) *Footlocks*.—Footlocks may be put down of any hard wood and any size over 2 by 3 inches, but nothing under this size shall be used. They should be laid fore and aft of ship at distances mentioned in upper-deck fittings, and be well fastened to either deck or flooring or to themselves, and properly filled in athwartships between stanchions, same as on upper deck.

(u) *Troughs*.—Suitable troughs may be formed on the footboards about 12 inches wide, when required, by nailing footboards on outside of stanchion and fitting up on the inside.

(v) *Casing for steering gear*.—A suitable casing must be placed over the ship's steering gear when found necessary.

(w) *Alleyways*.—Alleyways between the pens must not be less than 18 inches, free of all obstructions. One or more alleyways at least 18 inches wide must be left on each side of decks, so that the scuppers can be readily reached and kept clean.

VENTILATION.

7. Each cattle compartment not exceeding 50 feet in length must have at least 4 bell-mouthed ventilators, of not less than 18 inches inside diameter, and with tops exceeding 7 feet in height, two situated at each end of the compartment. Compartments over 50 feet long must have additional ventilators of same dimensions or efficient fans.

8. When it is desired to carry cattle upon the third deck, a special permit must be obtained from the inspector of the port. The vessel must be fitted as hereinbefore specified and properly lighted and ventilated. One set of ventilators should be trimmed to the wind and another set in the opposite direction. They should be tested previous to issuance of permit and should be kept in easy working order.

9. Suitable arrangements shall be made to provide at all times sufficient light for the proper tending of all animals.

10. No cattle shall be loaded along the alleyways by engine room unless the side of said engine room is covered by 1½-inch grooved-and-tongued lumber, making a 3-inch air-space.

HATCHES.

11. No cattle shall be loaded upon hatches on decks above cattle nor upon third-deck hatches when cattle are carried upon such decks, nor shall any merchandise, freight, or food for cattle be loaded upon said hatches, but said hatches shall at all times be kept clear.

(a) No cattle shall be loaded upon any hatch where the combings exceed 18 inches in height, and between-deck hatches shall have not less than 6 feet vertical space between the beams overhead and the hatch combings under foot for cattle with horns, and 5 feet 6 inches vertical space for cattle without horns.

(b) In loading cattle on upper decks four of the largest hatches shall be kept free of cattle—one hatch forward, one aft, and two amidships—so that the intervening spaces will be proportioned as equally as possible. Cattle may be placed upon hatches in excess of this number.

(c) Not more than two days' feed for cattle shall be allowed to be carried on deck; this shall be properly covered and shall be the first feed used.

12. All vessels shall carry hogsheads of not less than 400 gallons total capacity for each 100 head of cattle, and these shall be filled with fresh water before sailing and refilled as emptied.

(a) Each vessel shall carry water condensers which are in good working order, and of sufficient capacity to provide 8 gallons of fresh, cold water each twenty-four hours for each head of cattle.

13. Cattle or sheep suffering from broken limbs or other serious injuries during the voyage shall be slaughtered by the captain of the vessel.

14. The employment of all cattle attendants shall be under the control of owners or agents of steamships, and men so employed shall be reliable and signed as part of the ship's crew, and under the control of the captain of the said vessel. They shall be furnished with well-lighted and well-ventilated quarters, as good as the same accommodations furnished for the crew of the ship. An experienced foreman shall be in charge of each shipload of cattle, and not less than one-half of the cattle attendants must be experienced men who have made previous trips with cattle. There shall be one cattle attendant for each 35 head of cattle upon steamers having water pipes extending the entire length of both sides of compartments, and upon steamers not so fitted there shall be one attendant for each 25 head of cattle shipped.

15. Cattle shall be tied with three-fourths-inch rope, which shall not be used more than once, and must be made from manila or sisal. Any head ropes returned to the United States shall be immediately seized and destroyed by the inspector of the port.

16. False decks upon which cattle are loaded must be removed and the manure and dirt cleaned from underneath before receiving another load of cattle.

SHEEP.

17. *Attendants.*—There shall be one experienced man in charge of each 150 sheep during the winter months and one to each 200 sheep during the summer months.

(a) *Pens.*—Sheep pens should not exceed 20 feet by 8 feet where two tiers are carried, and each tier shall have a clear vertical space of not less than 3 feet. During the summer months sheep shall not be loaded in tiers between decks, but during the winter months two tiers may be placed in each wing and only one tier amidships.

(b) *Flooring stanchions.*—When the pens are built for two tiers of sheep, the flooring between the tiers shall be laid with tongued-and-grooved boards, the stanchions shall be of 4 by 6 inch spruce lumber, and shall be secured to the beams overhead by angle braces similar to cattle fittings.

Outside planking shall be of 2-inch spruce or 14-inch yellow pine lumber, secured to 4 by 6 inch spruce stanchions, with hook bolts similar to cattle fittings.

(c) *Alleyways.*—Athwartship alleyways not less than 18 inches wide in the clear shall be left between each pen, and fore-and-aft alleyways in front of each pen, having hayracks and water-tight troughs on three sides. When two tiers of sheep are carried, the fore-and-aft alleyways shall be 2 feet wide clear of all obstructions.

(d) *Space.*—The space for each full-grown sheep shall be 4 feet long by 14 inches wide, and for lambs or sheep under 100 pounds' weight 4 feet by 12 or 13 inches, 2 rows of sheep standing in the 8 feet width of pen.

18. No vessel shall be allowed to take on board any cattle or sheep unless the same have been at the port of embarkation at least twenty-four hours before the vessel sails, except in special cases and by direction of the inspector, nor until the loading of the other cargo has been completed.

19. The inspector may, in case he finds that any of the fittings are worn, decayed, or appear to be unsound, require the same to be replaced before he authorizes the clearance of the vessel. He will also supervise the loading of cattle, and see that they are properly stowed and tied, and that all the requirements of these regulations have been complied with.

J. STERLING MORTON, *Secretary.*

MODIFICATION OF ORDER CONCERNING TEXAS FEVER QUARANTINE LINE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., April 15, 1895.

SPECIAL ORDER CONCERNING IMPORTATION OF CATTLE FROM MEXICO.

It is hereby ordered that the regulations of this Department issued February 5, 1895,¹ defining the quarantine line on account of Texas, or splenic, fever, and the regulations of February 11, 1895,² concerning the importation of animals into the United States, be modified so far as they relate to the admission of Mexican cattle into the United States, as follows:

Mexican cattle which have been inspected by an inspector of this Department and found free from any infectious or contagious disease may be admitted into that portion of the State of California, south and west of the said quarantine line through the port of San Diego, and into that portion of the State of Texas south and east of the said quarantine line, through the ports of Eagle Pass and Laredo, for grazing or for immediate slaughter. Cattle may be admitted through the port of El Paso for immediate slaughter only. In all cases where cattle are admitted for immediate slaughter they shall be shipped by rail or boat to the point of destination.

On and after May 1, 1895, cattle will be admitted at the port of Brownsville, Tex., for grazing and immediate slaughter.

J. STERLING MORTON, *Secretary.*

¹ See p. 370.

² See p. 376.

OPERATION OF REGULATIONS POSTPONED.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., April 22, 1895.

To all inspectors in charge of the work of meat inspection:

As there may be doubt as to full authority under the law now in force, you are hereby directed to defer putting into operation the regulations of this Department concerning the tanking of carcasses found affected with trichinosis until July 1 next, at which time the act of Congress, approved March 2, becomes operative.

J. STERLING MORTON, *Secretary.*

OPERATION OF REGULATIONS POSTPONED.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY,
Washington, D. C., May 21, 1895.

The following additional instructions are sent inspectors in connection with the work of meat inspection:

As there appears to be some doubt as to the requirements of the regulations of February 7, 1895,¹ you are hereby instructed to require all carcasses found affected with trichinae to be kept separate, and not allow them or their products to be stamped or certified to, when they leave the abattoir under your charge.

Very respectfully,

D. E. SALMON, *Chief of Bureau.*

GENERAL INSTRUCTIONS.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY,
Washington, D. C., June 10, 1895.

To inspectors having supervision of employees of the Bureau of Animal Industry:

Hereafter, in computing the number of days for which salary is allowed, you are directed to deduct Sunday or holiday whenever an employee is absent both the day preceding and the day following such Sunday or holiday. If, however, an employee regularly employed is absent on Saturday and begins work on Monday, the Sunday intervening can be allowed. Also when an employee is present on Saturday and fails to report on Monday, the Sunday can be allowed. The same rule applies to holidays.

Very respectfully,

D. E. SALMON, *Chief of Bureau.*

REGULATIONS FOR THE INSPECTION OF LIVE STOCK AND THEIR PRODUCTS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 14, 1895.

The following rules and regulations are hereby prescribed for the inspection of live cattle, sheep, hogs, and their carcasses by virtue of the authority conferred upon the Secretary of Agriculture under the provisions of the act of Congress approved March 3, 1891,² entitled "An act to provide for the inspection of live cattle, hogs, and the carcasses and products thereof which are subjects of interstate commerce, and for other purposes," and amendments thereto approved March 2, 1895, and will supersede all former regulations for the inspection of live stock and their products.³

1. The proprietors of slaughterhouses, canning, salting, packing, or rendering establishments, engaged in the slaughter of cattle, sheep, or swine, the carcasses or products of which are to become subjects of interstate or foreign commerce,

¹ See p. 373.

² See p. 345.

³ See modification on p. 381.

shall make application to the Secretary of Agriculture for inspection of said animals and their products.

2. The said application must be in writing addressed to the Secretary of Agriculture, Washington, D. C., and shall state the location and address of the slaughterhouse or other establishment, the kind of animals slaughtered, the estimated number of animals slaughtered per week, and the character and quantity of the products to go into interstate or foreign commerce from said establishment; and the said applicant in his application shall agree to conform strictly with all lawful regulations or orders that may be made by the Secretary of Agriculture for carrying on the work of inspection at such establishment.

3. The Secretary of Agriculture will give said establishment an official number by which all its inspected products shall thereafter be known, and this number shall be used both by the inspectors of the Department of Agriculture and by the owners of said establishment, to mark the products of the establishment as hereinafter prescribed.

4. The Secretary of Agriculture will designate an inspector to take charge of the examination and inspection of animals and their products for each establishment which has been officially numbered, and will detail to such inspector such assistants or other employees as may be necessary to properly carry on the work of inspection at said establishment. The inspector and all employees under his direction shall have full and free access to all parts of the building or buildings used in the slaughter of animals and the conversion of their carcasses into food products.

(a) Each employee engaged in inspection under these regulations will be furnished with a numbered badge, which must be worn in a conspicuous manner while in the performance of his official duties, and which must not be allowed to leave his possession.

(b) Each employee furnished with a badge must deposit with the inspector in charge a receipt for the said badge and the sum of \$2, which amount must be transmitted by New York draft (without expense to the Department), together with the said receipt, to the Chief of Bureau of Animal Industry and be duly receipted for by the disbursing clerk of the Department, who will be the custodian of this guarantee fund. On return of this receipt and badge, by the employee at the expiration of his service, the deposit shall be immediately refunded to him.

5. An ante-mortem examination of all animals arriving at the stock yards for slaughter shall be made when they are weighed, or if not weighed this inspection shall be made in the pens. Any animal found to be diseased or unfit for human food shall be marked by placing in the ear a metal tag bearing "U. S. Condemned" and a serial number. Such condemned animals shall be placed in pens set apart for this purpose and removed only by a numbered permit, signed by the inspector, to an abattoir or rendering works designated by the said inspector, where they shall be killed under the supervision of an employee of the Bureau of Animal Industry and rendered in such manner that their products will be made unfit for human food.

Animals rejected on account of their pregnant or parturient condition must be held in the said pens during gestation and for ten days thereafter, unless removed by permit either for stockers or for rendering in the manner above specified.

6. The inspector in charge of said establishment shall carefully inspect all animals in the pens of said establishment about to be slaughtered, and no animal shall be allowed to pass to the slaughtering room until it has been so inspected. All animals found on either ante-mortem or post-mortem examination to be affected as follows are to be condemned and the carcasses thereof treated as indicated in section 7:

- (1) Hog cholera.
- (2) Swine plague.
- (3) Charbon, or anthrax.
- (4) Rabies.
- (5) Malignant epizootic catarrh.
- (6) Pyæmia and septicæmia.
- (7) Mange, or scab, in advanced stages.
- (8) Advanced stages of actinomycosis, or lumpy jaw.
- (9) Inflammation of the lungs, the intestines, or the peritoneum.
- (10) Texas fever.
- (11) Extensive or generalized tuberculosis.
- (12) Animals in an advanced state of pregnancy or which have recently given birth to young.
- (13) Any disease or injury causing elevation of temperature or affecting the

system of the animal to a degree which would make the flesh unfit for human food.

Any organ or part of a carcass which is badly bruised or affected by tuberculosis, actinomycosis, cancer, abscess, suppurating sore, or tapeworm cysts must be condemned.

7. The inspector or his assistant shall carefully inspect at the time of slaughter all animals slaughtered at said establishment and make a post mortem report of the same to the Department. The head of each animal shall be held until the inspection of the carcass is completed, in order that it may be identified in case of condemnation of the carcass. Should the carcass of any animal on said post-mortem examination be found to be diseased and unfit for human food, the said carcass shall be marked with the yellow condemnation tag, and the diseased organ or parts thereof, if removed from said carcass, shall be immediately attached to same. The entire carcass shall be at once removed, under the supervision of the inspector or that of some other reliable employee of the Department of Agriculture, to tanks on the premises, and deposited therein, and rendered in such manner as to prevent its withdrawal as a food product. Should the establishment have no facilities for thus destroying the said carcass, it must be removed from the premises by numbered permit from the inspector to rendering works designated by him and there destroyed under his supervision in such a manner as to make it unsalable as edible meat.

(a) Carcasses may be taken to the cooling rooms after marking with the yellow condemnation tag in cases where only a portion of the carcass is condemned, and when such portion can not be removed without damage to the carcass until it is properly chilled. After chilling the condemned portions must be cut out and removed to the tank, as provided for whole carcasses. Condemned parts that can be removed without damage to the carcass must be tanked immediately after condemnation.

(b) The inspector, or the employee detailed for such purpose, must remove the numbered stub of the condemnation tag at the time of placing the carcass or parts of carcass in the tanks, and return it to the office of the inspector in charge, with a report as to the number of carcasses or parts of carcasses destroyed, the reason for destruction, and also state that they were tanked in his presence.

(c) Should the owners of such condemned carcasses not consent to the foregoing disposition of them, then the inspectors are directed to brand the word "Condemned" upon each side and quarter of said carcasses and keep a record of the kind and weight of the carcasses, and they shall, under supervision of the inspector, be removed from the packing house where meats are prepared and stored for the interstate and foreign trade; and said firm or corporation shall forward, through the inspector, to the Secretary of Agriculture a sworn statement, monthly, giving in detail the disposition of the carcasses so condemned, and if the same have been sold, showing to whom, whether for consumption as food or otherwise, with what knowledge, if any, by the purchasers of their condemnation by this Department, and whether or not before such sale said carcasses have been cooked or their condition at the time of inspection by this Department altered, and, if so, in what way.

The inspectors shall, when authorized by the Secretary of Agriculture, give notice by publication to the express companies and common carriers at the place of condemnation of the fact of condemnation, giving the name of the owner of such carcasses, the time and place of slaughter, and the reason for rejection, and a description of the carcasses and warning them not to transport them out of the State.

8. All persons are warned against removing the tags so attached to condemned carcasses, and are notified that they will be prosecuted under the acts of Congress of March 3, 1891,¹ and March 2, 1895, for any such attempt to tamper with the device for marking condemned carcasses or parts of carcasses, as prescribed by the preceding regulation.

9. Carcasses or parts of carcasses which leave said establishment for interstate or export trade will be tagged by the inspector, or an employee designated by him, with a numbered tag issued by the Department of Agriculture for this purpose, and a record of the same will be sent to the Department at Washington.

(a) Carcasses or parts of carcasses which go into the cutting room of an abattoir and those which are cut up for the local market or are used for canning purposes must not be tagged. Those which are to be shipped from one abattoir to another for canning purposes must not be tagged; and the inspector in charge of the abattoir to which the shipment is consigned, in seal cars, must be notified of the

¹ Sec. p. 345.

said shipment, including the number and initials of the said cars and the routes traversed by them.

10. Each article of food products made from inspected carcasses must bear a label containing the official number of the establishment from which said product came, and also contain a statement that the same has been inspected under the provisions of the act of March 3, 1891.

(a) A copy of said label must be filed at the Department of Agriculture, Washington, D. C., and, after filing, said label will become the mark of identification showing that the products to which it has been attached have been inspected, as provided by these rules and regulations; and any person who shall forge, counterfeit, alter, or deface said label will be prosecuted under the penalty clause of section 4 of the act of March 3, 1891, as amended in the act of March 2, 1895.

(b) Each package to be shipped from said establishment to any foreign country must have printed or stenciled on the side or on the top by the packer or exporter the following:

FOR EXPORT.

- (a) Official number of establishment.
- (b) Number of pieces or pounds.
- (c) Trademark.

In case said package is for transportation to some other State or Territory or to the District of Columbia, in place of the words "For export," the words "Interstate trade" shall be substituted.

(c) The letters and figures in the above print shall be of the following dimensions: The letters in the words "For export" or the words "Interstate trade" shall be not less than three-fourths of an inch in length and the other letters and figures not less than one-half inch in length. The letters and figures affixed to said package shall be black and legible, and shall be in such proportion as the inspector of the Department of Agriculture may designate.

11. The inspector of the Department of Agriculture in charge of said establishment, being satisfied that the articles in said packages came from animals inspected by him, and that they are wholesome, sound, and fit for human food, shall paste upon said packages meat inspection stamps bearing serial numbers.

12. In order that the stamps may be protected, and to insure uniformity in affixing, inspectors will require of the proprietors of abattoirs and packing establishments the adoption of cases suitable for one of the two methods mentioned below:

(a) The stamp may be affixed in a grooved space let into the box, of sufficient size to admit it, similar to that required by the Internal Revenue Bureau for the stamping of packages of plug tobacco.

(b) Stamps may be placed on either end of the package, providing the sides are made to project at least half an inch to afford the necessary protection from abrasion.

13. The stamp having been affixed, it must be immediately canceled. For this purpose the inspector will use a rubber stamp having five parallel waved lines long enough to extend beyond each side of the stamp on the wood of the package. At the top of said rubber stamp shall be the name of the inspector, and at the bottom the abattoir number. The imprinting from this rubber stamp must be with durable ink over and across the stamp, and in such a manner as not to make the reading matter of the stamp illegible. The stamp having been affixed and canceled, it must be immediately covered with a coating of transparent varnish or other similar substance. Orders for inspection stamps and for rubber canceling stamps must be made by the inspector on the Chief of the Bureau of Animal Industry.

14. No stamps will be issued by the inspector except to employees of this Department designated by him to supervise the affixing of said stamps to packages of inspected products, and each employee having charge of this work shall be held personally responsible for the stamps issued to him, and shall make an accurate daily report to the inspector of the use of such stamps, and all unused stamps shall be turned over to the custody of the said inspector or of his clerk at the close of each day's work.

(a) Proprietors of abattoirs will supply all the necessary help to affix the stamps, which must be done under the supervision of an employee of the inspector in charge.

(b) No stamps shall be allowed to remain loose about the office or the abattoirs, and inspectors are instructed to use such additional safeguards as in their

judgment will be necessary to properly account for every stamp issued by them, and to have the work of affixing so carefully supervised that nothing but packages of inspected products will be stamped with the meat-inspection stamp of this Department.

(c) Any stamps damaged or not used should not appear upon the reports as having been affixed to packages, but should be returned to the Department and a report made as to the reasons for their return.

These regulations will also apply to meat-inspection tags or seals and certificates of inspection.

15. Whenever any package of meat products bearing the inspection stamp shall have been opened and its contents removed for sale, the stamp on said package must be obliterated.

16. Reports of the work of inspection carried on in every establishment shall be daily forwarded to the Department by the inspector in charge, on such blank forms and in such manner as will be specified by the Department.

17. Whenever an abattoir suspends slaughtering operations, the inspector in charge will promptly furlough without pay, until further orders, all employees whose duties are affected by such suspension, notifying this office of the date of closing down. During said suspension he will retain only such employees as are actually necessary to supervise the shipments of inspected products from said abattoirs.

SWINE.

18. The inspection of all swine slaughtered in the United States, for both interstate and export trade, will be similar in all respects to that of cattle and sheep. (See rules 1 to 17.) It must include a careful ante-mortem examination of all hogs, as required by rules 5 and 6, and a subsequent post-mortem examination as required by rule 7. A microscopic examination for trichinæ must be required for all swine products exported to countries requiring such examination.

(a) No microscopic examination will be made of hogs slaughtered for interstate trade, but this examination will be confined to those intended for the export trade, and only at abattoirs which export pork products to countries requiring a certificate from this Government to secure the admission of such meats. All inspectors issuing certificates for export of pork products which have been microscopically examined will enter upon the same the number of each stamp used, and imprint the words "Microscopically examined in addition to regular inspection" across the face of the certificate.

(b) The carcasses of all hogs that are to enter into interstate trade as dressed pork will be tagged in the same manner as beef is now marked for identification. The products of hog carcasses which enter into interstate trade will be stamped in the same manner as are the products of cattle.

(c) The purple meat-inspection stamp will be used only upon packages containing products of hog carcasses which have been microscopically examined for shipment to countries requiring such examination.

19. The microscopic inspection of pork intended for export to countries requiring such inspection shall be conducted as follows:

When the slaughtered hog is passed into the cooling room of said establishment the inspector in charge, or his assistants, will take from each carcass three samples of muscle, one from the "pillar of the diaphragm," one from the psoas muscle, and the other from the inner aspect of the shoulder, and said samples will be put in a self-locking tin box and a numbered tag will be placed upon the carcass from which said samples have been taken, and a duplicate of said tag will be placed in the box with said samples. The boxes containing the samples from the hogs in the cooling room, so tagged, will be taken to the microscopist for such establishment, who shall thereupon cause a microscopic examination of the contents of each box containing samples to be made, and shall furnish a written report to the inspector, giving the result of said microscopic examination, together with the numbers of all carcasses from which samples have been examined.

20. All carcasses reported by the microscopist to the inspector as affected with trichinæ shall at once be removed from the cooling room or cellar of said establishment under the supervision of said inspector, or that of some other reliable employee of the Department of Agriculture, and shall be disposed of in accordance with the provisions of section 7, or they may be rendered into edible lard at a temperature not less than 150° F., or made into cooked meat products if the temperature is raised to the boiling point a sufficient time to thoroughly cook the interior of the pieces.

21. The inspector in charge of the slaughtering or other establishment will issue a certificate of inspection for all carcasses of animals, or the food products thereof,

which are to be exported to foreign countries; which certificate will cite the name of the shipper, the date of inspection, and the name of the consignee and country to which said articles are to be exported. Said certificate will also contain the numbers of the stamps attached to the articles to be exported, and will be issued in serial numbers and in triplicate form. One certificate only will be issued for each consignment. One copy thereof will be delivered to the consignor of such shipment, one copy will be attached to the invoice or shipping bill to accompany the same, and be delivered by the transportation companies to the chief officer of the vessel upon which said consignment is to be transported.

(a) All names, marks, stamp numbers, imprints, and other writing of any description made upon the certificate of inspection must be copied on the stub of the book of certificates, and be duly signed by the inspector. This stub constitutes the third copy of the certificate, and shall be preserved and forwarded to this Department.

22. Inspectors are requested to notify the municipal authorities of the character of this inspection and to cooperate with them in preventing the entry of condemned animals or their products into the local market.

J. STERLING MORTON, *Secretary*.

EMPLOYEES TO WEAR BADGES.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 21, 1895.

To employees of the Bureau of Animal Industry:

Hereafter each inspector, assistant inspector, live-stock agent, stock examiner, and tagger shall be required to wear a badge in a conspicuous manner while in the performance of his official duties, and it must not be allowed to leave his possession. Such badge, properly numbered, will be furnished by the Chief of the Bureau of Animal Industry on application through the officer to whom the employee reports.

Each employee furnished with a badge must deposit with the inspector in charge a receipt for the said badge and the sum of \$2, which amount must be transmitted by New York draft (without expense to the Department), together with the said receipt, to the Chief of Bureau of Animal Industry and be duly receipted for by the disbursing clerk of the Department, who will be custodian of this guarantee fund. On return of this receipt and badge by the employee at the expiration of his service, the deposit shall be immediately refunded to him.

J. STERLING MORTON, *Secretary*.

CONCERNING TRANSPORTATION OF CATTLE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., July 27, 1895.

To all railroad companies transporting cattle within the United States:

The attention of the officers of all railroad companies engaged in the transportation of live stock from one State or Territory into another, or whose roads form any part of a line of road transporting live stock from one State or Territory into another, is directed to the following sections of the Revised Statutes, hereto annexed, viz, sections 4386, 4387, 4388, and 4389.¹

Complaint has been made to this Department, by its officers supervising the movement of animals in the interstate and export trade, that the provisions of the foregoing sections are not complied with by many railroad companies, and that cattle and other live stock are confined in cars for a period exceeding twenty-eight hours, and that at times when they are unloaded they are not allowed the five consecutive hours for rest provided by statute.

The failure of the railroad companies to conform to this law causes animals great suffering while in transit to points of destination, which it is the intent of

¹ See p. 352.

the law to prevent. Railroad companies will therefore make such arrangements as are necessary in their train service, and provide the necessary feeding and watering stations to comply with the above-named sections of the Revised Statutes, and any failure to do this will render them liable on conviction to the penalty provided in section 4388.

J. STERLING MORTON, *Secretary*.

MODIFICATION OF REGULATIONS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., July 30, 1895.

To all inspectors in charge of meat inspection:

It is hereby ordered that section 5 of the regulations of this Department dated June 14, 1895,¹ for the inspection of live stock and their products, be suspended if State and local authorities fail to cooperate in enforcing the provisions of this section, and in such cases the following provisional substitute shall be adopted:

5. An ante-mortem examination of all animals arriving at the stock yards for slaughter at abattoirs killing for the interstate trade shall be made when said animals are weighed, or, if not weighed, this inspection shall be made in the pens. Any animals found to be diseased or unfit for human food shall be marked by placing in the ear a metal tag bearing "U. S. Condemned" and a serial number. Such condemned animals shall be at once removed by the owner from the pens containing animals which have been inspected and found to be free from disease and fit for human food, and must be disposed of in accordance with the laws, ordinances, and regulations of the State and municipality in which said condemned animals are located.

J. STERLING MORTON, *Secretary*.

CONCERNING IMPORTATION OF SHEEP AND LAMBS FOR IMMEDIATE SLAUGHTER.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., August 5, 1895.

SPECIAL ORDER.

It is hereby ordered that section 3 of the regulations of this Department dated February 11, 1895,² for the inspection and quarantine of animals imported into the United States, be modified so far as relates to the admission of sheep and lambs from Canada into the United States for immediate slaughter, as follows:

Sheep and lambs may be imported into the United States from the Dominion of Canada for immediate slaughter accompanied by certificates as specified below, instead of those required by the above-mentioned section:

1. A certificate from the official veterinary inspector of the port of export, or of the province or district in which the sheep or lambs were raised or fed, stating that no contagious disease affecting sheep has existed in said province or district during the past three months.

2. An affidavit from the owner or importer that the sheep or lambs offered for importation are from the district covered by the certificate above mentioned; that they were not outside that district during a period of three months preceding shipment, and that when not driven they have been shipped direct from said district to the port of import in clean or disinfected cars.

J. STERLING MORTON, *Secretary*.

¹ See p. 384.

² See p. 378.

ORDER CONCERNING THE EXPORTATION OF MEAT.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., August 28, 1895.

Whereas section 2 of the act of Congress approved March 3, 1891, as amended in the act approved March 2, 1893, provides as follows:

"SEC. 2. That the Secretary of Agriculture shall also cause to be made a careful inspection of all live cattle the meat of which, fresh, salted, canned, corned, packed, cured, or otherwise prepared, is intended for exportation to any foreign country, at such times and places, and in such manner as he may think proper, with a view to ascertain whether said cattle are free from disease, and their meat sound and wholesome, and may appoint inspectors who shall be authorized to give an official certificate clearly stating the condition in which such cattle and meat are found, and no clearance shall be given to any vessel having on board any fresh, salted, canned, corned, or packed beef, being the meat of cattle killed after the passage of this act for exportation to and sale in a foreign country from any port in the United States, until the owner or shipper shall obtain from an inspector appointed under the provisions of this act a certificate that said cattle were free from disease and that their meat is sound and wholesome."

It is ordered that from and after September 16, 1895, all beef offered for transportation, whether fresh, salted, canned, corned, or packed, shall be accompanied by a certificate showing that the cattle from which it was produced were free from disease, and the meat sound and wholesome, by an inspector of this Department. And in order that it may be determined whether all beef exported has been so inspected and found to be wholesome, it is further ordered that the meat of all other species of animals, which for any reason does not bear the inspection tags and stamps of this Department, shall be packed in barrels, cases, or other packages, which are legibly marked in such manner as to clearly indicate the species of animal from which the meat was produced. Meat which is not so marked and which is not accompanied by a certificate of inspection will be classed as uninspected beef and will not be allowed exportation.

Notice is hereby given to exporters of meat, whether said meat is fresh, salted, canned, corned, packed, or otherwise prepared, and to owners and agents of vessels upon which said meat is exported, that no clearance can be given to any vessel having on board said meat until the provisions of this order are complied with.

J. STERLING MORTON, *Secretary.*

REGULATION CONCERNING FOOD AND ATTENDANCE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., August 31, 1895.

SPECIAL NOTICE.

To inspectors in charge of cattle quarantine stations and others:

In order to provide for the proper feeding and care of animals imported into the United States, section 19 of the regulations of February 11, 1895,¹ is hereby amended to read as follows:

Food and attendance must be provided by the owners of the stock quarantined, and said owner or his agent shall give satisfactory assurances to the inspector at the time of admission to quarantine that such provision will be made. The employees of such owners shall keep the sheds and yards clean to the satisfaction of the inspector, and be subject to the rules of the station. If for any cause the owners of the quarantined stock refuse or neglect to supply food and attendance, the inspector will furnish the same. The food and care so furnished shall be at the expense of the owners of the stock, and the charges therefor will be a lien on the animals. After the expiration of one-third of the quarantine period, if payment has not been made, the owners of the animals will be notified by the inspector that if said charges be not immediately paid, or satisfactory arrangements made for the payment, the inspector will sell the stock at public auction at the expiration of the period of quarantine to pay the expense of food and care during that

¹ See p. 378.

period. Notice of the sale will be published once a week for two weeks in a newspaper published in the county where the station is located; the day of sale will be at the expiration of the quarantine period, and at such place as may be designated by the inspector. From the proceeds of the sale an amount equal to the charges for food and care of the animals and the expenses of the sale will be covered into the United States Treasury, and the remainder, if any, will be held for the owners, but if not called for at the end of six months from date of sale, this balance will be deposited in the United States Treasury.

J. STERLING MORTON, *Secretary*.

CONCERNING EXPENSES OF QUARANTINE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., August 31, 1895.

SPECIAL NOTICE.

To railroad, steamboat, and other transportation companies:

You are hereby notified that hereafter the owners of animals which are subject to quarantine detention, when such animals are about to be imported into the United States, will be required to give satisfactory assurances for the payment of the expenses of quarantine, and unless such assurances are given said animals will not be received from transportation companies for admission to quarantine stations.

You are requested to notify all shippers or owners of such animals to this effect, and that unless said expenses are provided for said animals will not be permitted to enter the United States, but will remain in the custody of the transportation company, and must be returned to the country of origin.

J. STERLING MORTON, *Secretary*.

ORDER CONCERNING THE IMPORTATION OF CATTLE FROM THE REPUBLIC OF MEXICO.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., September 27, 1895.

Pursuant to the authority vested in the Secretary of Agriculture by virtue of an act of Congress entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," approved May 29, 1884,¹ and of an act entitled "An act providing for the inspection of meats for exportation, prohibiting the importation of adulterated articles of food or drink, authorizing the President to make proclamation in certain cases, and for other purposes," approved August 30, 1890,² and also of an act entitled "An act making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1896," approved March 2, 1895, it is ordered that from and after October 22, 1895, cattle may be admitted into the United States from the Republic of Mexico for grazing and for immediate slaughter through the ports of San Diego, Nogales, El Paso, Eagle Pass, Brownsville, and the subport of Laredo. The admission of said cattle is permitted subject to inspection by an inspector of the Bureau of Animal Industry, and no cattle will be admitted which are affected with or which have been exposed to the contagion of any disease liable to be disseminated among the domestic animals of the United States. The importer must produce evidence satisfactory to the inspector that his cattle have not been exposed to contagion during a period of ninety days previous to the importation.

Cattle imported into the district of the United States known as the Texas, or splenic, fever district will be subject to all regulations applying to the native cattle of that district. Cattle imported into other sections of the United States previous to December 1, 1895, must have been held for three months in the elevated districts, free from Texas, or splenic, fever infection, of the States of Sonora and Chihuahua, and will be subject to the laws and rules and regulations

¹ See Report of Bureau for 1884, p. 473.

² See p. 335.

of the States and Territories into which they are taken, and also subject to such regulations of this Department as may from time to time be made. The formal entry of the cattle and the application must be made at the places mentioned in this order, but the cattle will be allowed to cross the boundary at such points as may be agreed upon by the collector of customs of the district and the inspector of this Department as proper and convenient for inspection.

The operation of all orders and of all regulations or parts of regulations inconsistent with this order is hereby suspended until further notice.

J. STERLING MORTON, *Secretary*.

ORDER CONCERNING THE EXPORTATION OF MEAT.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., October 5, 1895.

Whereas section 2 of the act of Congress approved March 3, 1891, as amended in the act approved March 2, 1893, provides as follows:

"SEC. 2. That the Secretary of Agriculture shall also cause to be made a careful inspection of all live cattle, the meat of which, fresh, salted, canned, corned, packed, cured, or otherwise prepared, is intended for exportation to any foreign country, at such times and places, and in such manner as he may think proper, with a view to ascertain whether said cattle are free from disease and their meat sound and wholesome, and may appoint inspectors who shall be authorized to give an official certificate clearly stating the condition in which such cattle and meat are found, and no clearance shall be given to any vessel having on board any fresh, salted, canned, corned, or packed beef, being the meat of cattle killed after the passage of this act, for exportation to and sale in a foreign country from any port in the United States until the owner or shipper shall obtain from an inspector appointed under the provisions of this act a certificate that said cattle were free from disease and that their meat is sound and wholesome."

It is ordered that all beef offered for exportation, whether fresh, salted, canned, corned, or packed, shall be accompanied by a certificate of an inspector of this Department showing that the cattle from which it was produced were free from disease and that the meat was sound and wholesome. And in order that it may be determined whether all beef exported has been so inspected and found free from disease and wholesome, it is further ordered that the meat of all other species of animals which is packed in barrels, cases, or other packages, shall be legibly marked in such manner as to clearly indicate the species of animals from which the meat was produced. Meat which is not so marked, and which is not accompanied by a certificate of inspection, will be subject to unpacking and examination in order to ascertain if it is uninspected beef.

Notice is hereby given to exporters of beef, whether said beef is fresh, salted, canned, corned, packed, or otherwise prepared, and to owners and agents of vessels upon which said beef is exported, that no clearance can be given to any vessel having on board said beef until the provisions of this order are complied with.

As reliable evidence has been submitted showing that a large quantity of inspected beef has been prepared for exportation, the identity of which has been lost in the process of curing, and that the immediate enforcement of this order would prevent the fulfillment of many contracts now outstanding, and as it is also evident that the inspection force of this Department must be increased before the affected trade can be properly accommodated, it is directed that this order shall not be enforced until January 1, 1896.

All orders and regulations of this Department inconsistent with this order are hereby revoked.

J. STERLING MORTON, *Secretary*.

ORDER FOR QUARANTINE OF CATTLE, SHEEP, AND OTHER RUMINANTS, AND SWINE FROM SOUTH AMERICA

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., December 12, 1895.

Reliable information having been received that "foot-and-mouth" disease, contagious pleuro-pneumonia, and other contagious diseases are prevalent in South

America, it is hereby ordered that section 5 of the regulations of this Department, dated February 11, 1895,¹ be amended by striking out the words "South America," and that all neat cattle hereafter imported into the United States from any part of South America shall be subject to a quarantine of ninety days, counting from the date of arrival at the quarantine station; and all sheep and other ruminants and swine from South America shall be subject to a quarantine of fifteen days, counting from the date of arrival at the quarantine station. Any person contemplating the importation of animals from South America shall obtain a permit from the Secretary of Agriculture, as provided in section 6 of the regulations above mentioned.

J. STERLING MORTON, *Secretary*.

ORDER POSTPONING THE CERTIFICATION OF EXPORT BEEF TO MARCH 1, 1896.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., December 11, 1895.

Whereas section 2 of the act of Congress approved March 3, 1891, as amended in the act approved March 2, 1895, provides as follows:

"SEC. 2. That the Secretary of Agriculture shall also cause to be made a careful inspection of all live cattle, the meat of which, fresh, salted, canned, corned, packed, cured, or otherwise prepared, is intended for exportation to any foreign country, at such times and places, and in such manner as he may think proper, with a view to ascertain whether said cattle are free from disease, and their meat sound and wholesome, and may appoint inspectors who shall be authorized to give an official certificate clearly stating the condition in which such cattle and meat are found, and no clearance shall be given to any vessel having on board any fresh, salted, canned, corned, or packed beef, being the meat of cattle killed after the passage of this act, for exportation to and sale in a foreign country from any port in the United States until the owner or shipper shall obtain from an inspector appointed under the provision of this act a certificate that said cattle were free from disease, and that their meat is sound and wholesome."

It is ordered that all beef offered for exportation, whether fresh, salted, canned, corned, or packed, shall be accompanied by a certificate of an inspector of this Department, showing that the cattle from which it was produced were free from disease and that the meat was sound and wholesome. And in order that it may be determined whether all beef exported has been so inspected and found free from disease and wholesome, it is further ordered that the meat of all other species of animals which is packed in barrels, cases, or other packages shall be legibly marked in such manner as to clearly indicate the species of animals from which the meat was produced. Meat which is not so marked and which is not accompanied by a certificate of inspection will be subject to unpacking and examination in order to ascertain if it is uninspected beef.

Notice is hereby given to exporters of beef, whether said beef is fresh, salted, canned, corned, packed, or otherwise prepared, and to owners and agents of vessels upon which said beef is exported, that no clearance can be given to any vessel having on board said beef until the provisions of this order are complied with.

As numerous petitions have been received from reliable exporters of beef alleging that great damage to the export beef trade must follow the enforcement of this order, on January 1, 1896, on account of the large quantity of beef on hand which, though inspected, can not be identified for certification, and to give the affected trade the desired opportunity to appeal to Congress for certain modifications of the existing law, which are alleged to be necessary to prevent the destruction of a portion of this trade, it is directed that this order shall not be enforced until March 1, 1896.

All orders and regulations of this Department inconsistent with this order are hereby revoked.

J. STERLING MORTON, *Secretary*.

¹ See p. 376.

REGULATIONS PROHIBITING THE TRANSPORTATION OF ANIMALS AFFECTED WITH HOG CHOLERA, TUBERCULOSIS, OR SHEEP SCAB.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., December 13, 1895.

Notice is hereby given that, under the law relating to control of contagious and infectious diseases of animals, the regulations of the Bureau of Animal Industry dated April 15, 1887,¹ are hereby amended by additional section as follows:

"SEC. 15. Animals affected with hog cholera, tuberculosis, or sheep scab shall be considered animals affected with contagious or infectious diseases as designated by the law and the regulations of the Bureau of Animal Industry, and shall not enter into interstate trade nor be brought into contact with other animals intended for such trade. Such affected animals shall not be permitted to enter any stock yards or other places where animals are handled for interstate trade, and when so found at such places shall be condemned, tagged, and placed in quarantine by inspectors or employees of said Bureau until proper disposition is made of same."

Stock-yard companies, transportation companies, or others receiving or handling such diseased animals are hereby required to thoroughly disinfect such portions of their premises or property as contained such diseased animals, subject to the approval of the inspectors of said Bureau.

Such diseased animals so quarantined shall not be removed therefrom except by written permit of the inspector in charge. When such diseased animals are found, inspectors shall make careful inquiry as to shipper and owner of same and transportation company handling same, for the purpose of instituting prosecution under the law provided in such cases.

All animals entering stock yards where inspection exists shall be carefully inspected, and those affected with the contagious diseases above mentioned shall be condemned and tagged, and when so condemned shall not be shipped therefrom or enter into the interstate trade; and all violations of this regulation should be immediately reported to the Chief of the Bureau of Animal Industry for institution of prosecution according to law.

J. STERLING MORTON, *Secretary.*

ORDER AND REGULATIONS FOR THE INSPECTION OF CATTLE AND SHEEP FOR EXPORT.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., December 19, 1895.

It is hereby ordered that the order and regulations of February 7, 1895,² above mentioned, be and the same are hereby amended as follows:

"Section 2 [1] is hereby amended by the addition of Port Royal, S. C.; New Orleans, La., and Galveston, Tex., as ports of export."

And it is stipulated that transportation companies carrying cattle or sheep to Port Royal, S. C., for export shall establish at that point special stock yards for export cattle and sheep, and such stock yards shall be used for no other purpose.

The cattle exported from Port Royal, S. C., shall originate above the quarantine line established by the Department of Agriculture and shall not be unloaded south of said line prior to arrival at Port Royal.

Cattle exported from New Orleans, La., and Galveston, Tex., shall originate south of said quarantine line, and no cattle from north of said quarantine line shall be exported from ports of New Orleans, La., or Galveston, Tex., except by special permit from the Chief of the Bureau of Animal Industry. All cattle and sheep exported from the three ports above mentioned shall be inspected, and the provisions of sections 4 and 5 of order of February 7, 1895, shall be applicable thereto, together with such other provisions of said order as may be deemed practicable by the Chief of the Bureau of Animal Industry.

The tagging of export animals at above ports shall be discretionary with the Chief of the Bureau of Animal Industry.

J. STERLING MORTON, *Secretary.*

¹ See p. 327.

² See p. 373.

REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., January 27, 1896.

To the managers and agents of railroads and transportation companies of the United States, stockmen, and others:

In accordance with section 7 of the act of Congress approved May 29, 1884,¹ entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," and of the act of Congress approved August 8, 1894, making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1895, you are hereby notified that a contagious and infectious disease known as splenic, or Southern, fever exists among cattle in the following-described area:

All that country lying south, or below, a line beginning at the northwest corner of the State of California; thence east, south, and southeasterly along the boundary line of said State of California to the southeastern corner of said State; thence southerly along the western boundary line of Arizona to the southwest corner of Arizona; thence along the southern boundary lines of Arizona and New Mexico to the southeastern corner of New Mexico; thence northerly along the eastern boundary of New Mexico to the southern line of the State of Colorado; thence along the southern boundary lines of Colorado and Kansas to the southeastern corner of Kansas; thence southerly along the western boundary line of Missouri to the southwestern corner of Missouri; thence easterly along the southern boundary line of Missouri to the Mississippi River; thence southerly along the Mississippi River to the southern boundary line of Tennessee; thence easterly along said boundary line to the southwestern corner of Polk County, Tenn.; thence northerly along the eastern boundary line of Tennessee to the southern boundary line of Virginia; thence west along said boundary line to the boundary line of Kentucky at the western point of Virginia; thence northerly along said boundary line to the northernmost point of Virginia; thence southerly along said boundary line to the northeast corner of Virginia, where it joins the southeastern corner of Maryland at the Atlantic Ocean.

Whenever any State or Territory located above or below said quarantine line as above designated shall duly establish a different quarantine line, and obtain the necessary legislation to enforce said last-mentioned line strictly and completely within the boundaries of said State or Territory, and said last above-mentioned line and the measures taken to enforce it are satisfactory to the Secretary of Agriculture, he may, by a special order, temporarily adopt said State or Territorial line.

Said adoption will apply only to that portion of said line specified, and may cease at any time the Secretary may deem it best for the interests involved; and in no instance shall said modification exist longer than the period specified in said special order, and at the expiration of such time said quarantine line shall revert, without further order, to the line first above described.

Whenever any State or Territory shall establish a quarantine line for above purposes differently located from the above-described line, and shall obtain by legislation the necessary laws to enforce same completely and strictly, and shall desire a modification of the Federal quarantine line to agree with such State or Territorial line, the proper authorities of such State or Territory shall forward to the Secretary of Agriculture a true map or description of such line and a copy of the laws for enforcement of same, duly authenticated and certified.

Such States or Territories as now have a line established as last above mentioned can immediately forward certified copies of said line and laws for the enforcement thereof, and if satisfactory to the Secretary of Agriculture the same may be adopted at once and the Federal line so modified.

From the 15th day of February to the 15th day of November during each year no cattle are to be transported from said area south or below said Federal quarantine line above described to any portion of the United States above, north or west, of the above-described line, except by rail for immediate slaughter, and when so transported the following regulations must be observed:

1. When any cattle in course of transportation from said area are unloaded above, north or west, of this line to be fed or watered, the places where said cattle are to be fed or watered shall be set apart and no other cattle shall be admitted thereto.

¹See Report of Bureau for 1881, p. 477

2. On unloading said cattle at their points of destination pens shall be set apart to receive them, and no other cattle shall be admitted to said pens; and the regulations relating to the movement of Texas cattle prescribed by the cattle sanitary officers of the State where unloaded shall be carefully observed. The cars that have carried said stock shall be cleansed and disinfected before they are again used to transport, store, or shelter animals or merchandise.

3. All cars carrying cattle from said area shall bear placards stating that said cars contain Southern cattle, and each of the waybills of said shipments shall have a note upon its face with a similar statement. Whenever any cattle have come from said area and shall be reshipped from any point at which they have been unloaded to other points of destination, the cars carrying said animals shall bear similar placards with like statements, and the waybills be so stamped. At whatever point these cattle are unloaded they must be placed in separate pens, to which no other cattle shall be admitted.

4. The cars used to transport such animals, and the pens in which they are fed and watered, and the pens set apart for their reception at points of destination, shall be disinfected in the following manner:

- (a) Remove all litter and manure. This litter and manure may be disinfected by mixing it with lime or saturating it with a 5 per cent solution of carbolic acid, or, if not disinfected, it may be stored where no cattle can come into contact with it until after November 15.
- (b) Wash the cars and the feeding and watering troughs with water until clean.
- (c) Saturate the walls and floors of the cars and fencing, troughs, and chutes of the pens with a solution made by dissolving 4 ounces of chloride of lime to each gallon of water: or disinfect the cars with a jet of steam under a pressure of not less than 50 pounds to the square inch.

Cattle from the Republic of Mexico may be admitted into the United States to remain below said Federal quarantine line after inspection according to law, but said cattle shall not be permitted to cross said quarantine line otherwise than by rail for immediate slaughter, except by special permit from the inspectors of the Bureau of Animal Industry issued according to the regulations of the said Bureau, and no permit shall be issued except for cattle free from splenic, or Texas, fever, or contact therewith during the three months preceding the issuance of said permit, and which have been grazed in a locality free from infection of such fever.

The losses which formerly occurred to the owners of susceptible cattle, both in the interstate and export trade, by the contraction of this disease from exposure in unclean and infected cars and pens, and by means of the manure carried in unclean cars from place to place, became a matter of grave and serious concern to the cattle industry of the United States until this danger was removed by the inspection of this Department. It is absolutely essential, therefore, that this cattle industry should continue to be protected as far possible by separating the dangerous cattle and by the adoption of efficient methods of disinfection.

Inspectors will be instructed to see that disinfection is properly done, and it is expected that transportation companies will promptly put into operation the above methods.

All prior orders conflicting herewith are hereby revoked.

J. STERLING MORTON, *Secretary.*

REGULATIONS CONCERNING CATTLE TRANSPORTATION.¹

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 1, 1896.

To the managers and agents of railroads and transportation companies of the United States, stockmen, and others:

In accordance with section 7 of the act of Congress approved May 29, 1884,² entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," and of the act of Congress approved March 2, 1895, making appropriation for the Department of Agriculture for the fiscal year ending June 30,

¹ See amendment on p. 407.

² See Report of Bureau for 1884, p. 473.

1898, you are hereby notified that a contagious and infectious disease known as splenic, or Southern, fever exists among cattle in the following-described area:¹

All that country lying south, or below, a line beginning at the northwest corner of the State of California; thence east, south, and southeasterly along the boundary line of said State of California to the southeastern corner of said State; thence southerly along the western boundary line of Arizona to the southwest corner of Arizona; thence along the southern boundary lines of Arizona and New Mexico to the southern corner of New Mexico; thence northerly along the eastern boundary of New Mexico to the southern line of the State of Colorado; thence along the southern boundary lines of Colorado and Kansas to the southeastern corner of Kansas; thence southerly along the western boundary of Missouri to the southwestern corner of Missouri; thence easterly along the southern boundary line of Missouri to the Mississippi River; thence southerly along the Mississippi River to the southern boundary line of Tennessee; thence easterly along said boundary line to the southeastern corner of Polk County, Tenn.; thence northerly along the eastern boundary line of Tennessee to the southern boundary line of Virginia; thence west along said boundary line to the boundary line of Kentucky at the western point of Virginia; thence northerly along said boundary line to the northernmost point of Virginia; thence southerly along said boundary line to the northeast corner of Virginia, where it joins the southeastern corner of Maryland at the Atlantic Ocean.

Whenever any State or Territory located above or below said quarantine line as above designated shall duly establish a different quarantine line, and obtain the necessary legislation to enforce said last-mentioned line strictly and completely within the boundaries of said State or Territory, and said last above-mentioned line and the measures taken to enforce it are satisfactory to the Secretary of Agriculture, he may by a special order temporarily adopt said State or Territorial line.

Said adoption will apply only to that portion of said line specified, and may cease at any time the Secretary may deem it best for the interest involved, and in no instance shall said modification exist longer than the period specified in said special order; and at the expiration of such time said quarantine line shall revert without further order to the line first above described.

Whenever any State or Territory shall establish a quarantine line, for above purposes, differently located from the above-described line, and shall obtain by legislation the necessary laws to enforce same completely and strictly, and shall desire a modification of the Federal quarantine line to agree with such State or Territorial line, the proper authorities of such State or Territory shall forward to the Secretary of Agriculture a true map or description of such line and a copy of the laws for enforcement of same, duly authenticated and certified.

Such States or Territories as now have a line established as last above mentioned can immediately forward certified copies of said line and laws for the enforcement thereof, and if satisfactory to the Secretary of Agriculture, the same may be adopted at once and the Federal line so modified.

From the 15th day of February to the 15th day of November during each year no cattle are to be transported from said area south of or below said Federal quarantine line above described to any portion of the United States above, north, or west of the above described line, except by rail for immediate slaughter, and when so transported the following regulations must be observed:

1. When any cattle in course of transportation from said area are unloaded above, north, or west of this line to be fed or watered, the places where said cattle are to be fed or watered shall be set apart and no other cattle shall be admitted thereto.

2. On unloading said cattle at their points of destination, pens shall be set apart to receive them, and no other cattle shall be admitted to said pens; and the regulations relating to the movement of cattle from said area, prescribed by the cattle sanitary officers of the State where unloaded, shall be carefully observed. The cars that have carried said stock shall be cleansed and disinfected before they are again used to transport, store, or shelter animals or merchandise.

3. All cars carrying cattle from said area shall bear placards stating that said cars contain Southern cattle, and each of the waybills of said shipments shall have a note upon its face with a similar statement. Whenever any cattle have come from said area and shall be reshipped from any point at which they have been unloaded to other points of destination, the cars carrying said animals shall bear similar placards with like statements, and the waybills be so stamped. At what-

¹ See regulations modifying orders on pp. 399, 400, 401, 402, 403, 404.

over point these cattle are unloaded they must be placed in separate pens, to which no other cattle shall be admitted.

4. The cars and boats used to transport such animals, and the pens in which they are fed and watered, and the pens set apart for their reception at points of destination, shall be disinfected in the following manner:

- (a) Remove all litter and manure. This litter and manure may be disinfected by mixing it with lime or saturating it with a 5-per cent solution of carbolic acid, or, if not disinfected, it may be stored where no cattle can come into contact with it until after November 15.
- (b) Wash the cars and the feeding and watering troughs with water until clean.
- (c) Saturate the walls and floors of the cars, and fencing, troughs, and chutes of the pens with a solution made by dissolving 4 ounces of chloride of lime to each gallon of water. Or disinfect the cars with a jet of steam under a pressure of not less than 50 pounds to the square inch.

Cattle from the Republic of Mexico may be admitted into the United States to remain below said Federal quarantine line after inspection according to law, but said cattle shall not be permitted to cross said quarantine line otherwise than by rail for immediate slaughter, except by special permit from the inspectors of the Bureau of Animal Industry issued according to the regulations of the said Bureau, and no permit shall be issued except for cattle free from splenic, or Texas, fever, or from contact therewith during the three months preceding the issuance of said permit, and which have been grazed in a locality free from infection of such fever.

The losses which formerly occurred to the owners of susceptible cattle, both in the interstate and export trade, by the contraction of this disease from exposure in unclean and infected cars and pens, and by means of the manure carried in unclean cars from place to place, became a matter of grave and serious concern to the cattle industry of the United States until this danger was removed by the inspection of this Department. It is absolutely essential, therefore, that this cattle industry should continue to be protected, as far as possible, by separating the dangerous cattle and by the adoption of efficient methods of disinfection.

Inspectors will be instructed to see that disinfection is properly done, and it is expected that transportation companies will promptly put into execution the above methods.

All prior orders conflicting herewith are hereby revoked.

J. STERLING MORTON, *Secretary*.

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF VIRGINIA.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 24, 1896.

In accordance with the regulations concerning cattle transportation issued by this Department February 1, 1896,¹ the State of Virginia has located a quarantine line described as follows, to wit:

"Beginning on the boundary line between Virginia and North Carolina at a point coinciding with the summit of the Blue Ridge Mountains, thence following the summit of said mountains northeasterly to the southern boundary of Bedford County, thence following the southern and eastern boundaries of Bedford County to the James River, thence following the James River to the southeastern corner of Charles City County, thence northerly and easterly along the western and northern boundaries of James City, Gloucester, Mathews, and Accomac counties to the Atlantic Ocean."

And whereas said quarantine line as above set forth is satisfactory to this Department, and legislation has been enacted by the State of Virginia to enforce said quarantine line, therefore, in accordance with the regulations of February 1, 1896, the above quarantine line is adopted for the State of Virginia by this Department, for the period beginning on this date and ending November 15, 1896, in lieu of the quarantine line described in said order of February 1, 1896, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary*.

¹ See p. 397.

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF TEXAS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 25, 1896.

In accordance with the regulations concerning cattle transportation issued by this Department February 1, 1896,¹ the State of Texas has located a quarantine line as follows, to wit:

"Beginning at the southwest corner of the county of Pecos, on the bank of the Rio Grande River; thence following the western boundary of Pecos County to the southeast corner of Reeves County; thence following the boundary line between the counties of Pecos and Reeves to the Pecos River; thence southeasterly, following the Pecos River to the northwest corner of Crockett County; thence easterly along the northern boundary of Crockett and Schleicher counties to the southeastern corner of Irion County; thence northerly along the eastern boundary of Irion County to the northeast corner of said county; thence northerly to the southern boundary of Coke County; thence westerly to the southwest corner of Coke County; thence northerly along the western boundary of Coke County to the southern boundary of Mitchell County; thence easterly to the southeastern corner of Mitchell County; thence northerly along the western boundary of Nolan County to the northwestern corner of Nolan County; thence easterly along the northern boundary of said county to the southwestern corner of Jones County; thence northerly along the western boundary of Jones County with the southern boundary of Stonewall County; thence eastwardly along the northern boundaries of Jones and Shackelford counties to the southwest corner of Throckmorton County; thence northerly along the western boundaries of Throckmorton, Baylor, and Wilbarger counties to the Red River; thence continuing along the Red River in a southeasterly direction to the southeastern corner of the county of Greer; thence northerly, following the course of the north fork of the Red River to its intersection with the eastern boundary line of Wheeler County; thence north with the eastern boundary line of Wheeler, Hemphill, and Lipscomb counties to the northeast corner of Lipscomb County; thence in a westerly direction with the northern boundary lines of Lipscomb, Ochiltree, Hansford, Sherman, and Dallam counties to northwestern corner of Dallam County to the eastern line of New Mexico."

And whereas said quarantine line as above set forth is satisfactory to this Department, and legislation has been enacted by the State of Texas to enforce said quarantine line, therefore, in accordance with the regulations of February 1, 1896, the above quarantine line is adopted for the State of Texas by this Department for the period beginning on this date and ending November 15, 1896, in lieu of the quarantine line described in said order of February 1, 1896, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary.*

ORDER POSTPONING THE CERTIFICATION OF EXPORT BEEF TO JULY 1, 1896.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 25, 1896.

Whereas section 2 of the act of Congress approved March 3, 1891,² as amended in the act approved March 2, 1895, provides as follows:

"SEC. 2. That the Secretary of Agriculture shall also cause to be made a careful inspection of all live cattle the meat of which, fresh, salted, canned, corned, packed, cured, or otherwise prepared, is intended for exportation to any foreign country, at such times and places and in such manner as he may think proper, with a view to ascertain whether said cattle are free from disease and their meat sound and wholesome, and may appoint inspectors who shall be authorized to give an official certificate, clearly stating the condition in which such cattle and meat are found, and no clearance shall be given to any vessel having on board any fresh, salted, canned, corned, or packed beef being the meat of cattle killed after the passage of this act for exportation to and sale in a foreign country from any port in the United States until the owner or shipper shall obtain from an inspector

¹ See p. 397.

² See p. 345.

appointed under the provision of this act a certificate that said cattle were free from disease and that their meat is sound and wholesome."

It is ordered that all beef offered for exportation, whether fresh, salted, canned, corned, or packed, shall be accompanied by a certificate of an inspector of this Department showing that the cattle from which it was produced were free from disease and that the meat was sound and wholesome. And in order that it may be determined whether all beef exported has been so inspected and found free from disease and wholesome, it is further ordered that the meat of all other species of animals which is packed in barrels, cases, or other packages shall be legibly marked in such manner as to clearly indicate the species of animals from which the meat was produced. Meat which is not so marked, and which is not accompanied by a certificate of inspection, will be subject to unpacking and examination in order to ascertain if it is uninspected beef.

Notice is hereby given to exporters of beef, whether said beef is fresh, salted, canned, corned, packed, or otherwise prepared, and to owners and agents of vessels upon which said beef is exported, that no clearance can be given to any vessel having on board said beef until the provisions of this order are complied with.

As it has been found impossible to establish inspection prior to March 1, 1896, at all points where beef is prepared and packed for the export trade, and as legislation is now pending modifying the requirement for certificates with all exported beef, it is directed that this order shall not be enforced until July 1, 1896.

All orders and regulations of this Department inconsistent with this order are hereby revoked.

J. STERLING MORTON, *Secretary.*

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF ARKANSAS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., March 2, 1896.

In accordance with the regulations concerning cattle transportation issued by this Department February 1, 1896,¹ the State of Arkansas has located a quarantine line described as follows, to wit:

"Beginning at the northwest corner of the county of Benton, thence southerly along the western boundary line of Benton and Washington counties to the southwest corner of Washington County; thence easterly along the southern boundaries of the counties of Washington, Madison, Newton, Searcy, and Stone to the western boundary of Independence County; thence southerly along the western boundary of Independence County to the southwest corner of Independence County; thence easterly along the southern boundary of Independence County to the southeast corner of Independence County; thence northerly along the eastern boundary of said county to the northeast corner of said county; thence easterly along the southern boundary of Lawrence County to the southeast corner of said county; thence northerly along the eastern boundary of said county to the southwestern corner of Greene County; thence easterly along the southern boundary of Greene County to the southern boundary of the State of Missouri and along said southern boundary of the State of Missouri to the Mississippi River; thence southerly along the Mississippi River to the northwestern corner of the county of Shelby, State of Tennessee."

And whereas said quarantine line as above set forth is satisfactory to this Department, and legislation has been enacted by the State of Arkansas to enforce said quarantine line, therefore, in accordance with the regulations of February 1, 1896, the above quarantine line is adopted for the State of Arkansas by this Department, for the period beginning on this date and ending November 15, 1896, in lieu of the quarantine line described in said order of February 1, 1896, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary.*

¹ See p. 307.

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE TERRITORY OF OKLAHOMA.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., March 3, 1896.

In accordance with the regulations concerning cattle transportation issued by this Department February 1, 1896,¹ the Territory of Oklahoma has located a quarantine line as follows, to wit:

"Beginning on the Red River at the southeastern corner of the county of Greer; thence northerly following the course of the North Fork of the Red River to its intersection with the southern boundary line of Roger Mills County; thence easterly along the southern boundary of Roger Mills and Washita counties to the southeastern corner of Washita County; thence northerly along the eastern boundary of Washita County to the northeast corner of said county; continuing in a northerly direction along the eastern boundary of the county of G to the southwestern corner of the county of Blaine; thence easterly along the southern boundary of Blaine County to the southeast corner of said county; thence north on the eastern boundary of said county to the northwest corner of Canadian County; thence east on the northern boundary of said county to the northeast corner of said county; thence north along the eastern boundary of Kingfisher County to the northeastern corner of said county; thence east along the southern boundary of O County to the southeast corner of said county; thence north along the eastern boundary of O County to the northeast corner of said county; thence east along the southern boundary of K County to the west line of the Ponca Indian Reservation; thence north on the west line of said reservation to the northwest corner of said reservation; thence east along the northern boundary of the Ponca Reservation to the Arkansas River; thence in a northerly direction following the course of said river to its intersection with the thirty-seventh parallel of north latitude at the southern boundary line of Kansas."

So much of the quarantine line for the State of Texas described in the order of February 25, 1896,² beginning at a point on the Red River at its intersection with the southern boundary line of Roger Mills County, and extending northerly and westerly therefrom, is hereby revoked during the enforcement of the above line for the Territory of Oklahoma.

And whereas said quarantine line as above set forth is satisfactory to this Department, and legislation has been enacted by the Territory of Oklahoma to enforce said quarantine line, therefore, in accordance with the regulations of February 1, 1896, the above quarantine line is adopted for the Territory of Oklahoma by this Department for the period beginning on this date and ending November 15, 1896, in lieu of the quarantine line described in said order of February 1, 1896, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary*.

HUMANE TREATMENT OF ANIMALS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., May 13, 1896.

GENERAL ORDER TO INSPECTORS.

It is the desire of this Department that the influence of all employees should be used, so far as is warranted by the law, for the purpose of securing the humane treatment of animals in transportation and in the stock yards. Depriving animals of food and drink for unusual periods and beating and worrying them are practices calculated to make the animals feverish and their meat unwholesome, and should be discountenanced and prevented. You will therefore give such instructions to your subordinates as will insure careful treatment of any animals which they may be called upon to handle, and as will also lead them to use their influence for the same end with all other persons with whom they come in contact.

You will please make an investigation of the manner in which animals are transported and handled by the railroad companies and stock yards which come under your observation, and make such suggestions as may occur to you with a

¹ See p. 397.

² See p. 400.

view to improving the service and protecting animals from undue suffering or cruelty. Injured animals which are evidently suffering severe pain should be promptly reported to the humane societies, unless the owner or the stock yard company properly cares for them within a reasonable time.

CHAS. W. DABNEY, JR.,
Acting Secretary.

GENERAL INSTRUCTIONS.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY,
Washington, D. C., March 21, 1896.

To inspectors in charge of abattoirs:

The following instructions are given for your guidance in carrying out the order of December 18, 1895:¹

Animals showing symptoms of hog cholera, tuberculosis, or sheep scab shall not be allowed shipment to any other State, but will be placed in quarantine and disposed of as heretofore ordered.

Stock yard companies shall thoroughly clean and disinfect such portions of their premises as have contained animals affected with contagious diseases. In case of failure to comply with this order the stock yards will be considered as infected and as being in quarantine.

Sheep affected with scab may be properly dipped one or more times and held until you are convinced that the disease is cured, after which they may be liberated.

No sheep shall be allowed shipment from infected stock yards to any other State for feeding or breeding purposes unless they have first been satisfactorily dipped under your supervision.

Stock yard companies must provide yards and shipping chutes, which have been cleaned and disinfected, for receiving sheep after they have been dipped.

All cars in which sheep are to be shipped for feeding or breeding purposes must be cleaned and disinfected before loading.

No hogs shall be allowed shipment from infected stock yards to any other State for feeding or breeding purposes.

Very respectfully,

D. E. SALMON, *Chief of Bureau.*

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF NORTH CAROLINA.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 4, 1896.

Whereas the governor of North Carolina has indicated his intention to establish a quarantine line, under the laws of that State, and in accordance with the Regulations Concerning Cattle Transportation, issued by this Department February 1, 1896,² located as follows:

"Beginning at the southwest corner of the county of Cherokee, thence along the southern boundaries of the counties of Cherokee, Clay, Macon, Jackson, and Transylvania, to the southeast corner of the county of Transylvania; thence northwesterly along the eastern boundary of Transylvania County to the southwest corner of the county of Buncombe; thence easterly along the southern boundary of the said county to the summit of the Blue Ridge Mountains; thence in a northeasterly direction following the said mountains to their intersection with the northern boundary of the State of North Carolina."

And whereas said quarantine line as above set forth is satisfactory to this Department, and legislation has been enacted by the State of North Carolina by which said quarantine line may be enforced, therefore, in accordance with the regulations of February 1, 1896, the above quarantine line is adopted for that State by this Department for the period beginning on this date and ending November 15, 1896, in lieu of the quarantine line described in said order of February 1, 1896, for said area, unless otherwise ordered.

This order will take effect upon the issuance of the proclamation of the governor of the said State of North Carolina, establishing said line, and directing its enforcement.

J. STERLING MORTON, *Secretary.*

¹ See p. 395.

² See p. 397.

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF TENNESSEE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 5, 1896.

In accordance with the regulations concerning cattle transportation issued by this Department February 1, 1896,¹ the State of Tennessee has located a quarantine line as follows, to wit:

"Beginning at the northwest corner of the county of Shelby on the bank of the Mississippi River; thence along the northern boundary of the said county to the northeast corner of said county; thence northerly along the western boundary of Fayette County to the northwest corner of Fayette County; thence easterly along the northern boundary of Fayette County to the northeast corner of said county; thence northerly along the western boundary of Hardeman County to the northwest corner of said county; thence easterly along the southern boundary of Haywood County to the southeast corner of said county; thence northerly along the eastern boundary of Haywood County to the northeast corner of said county; thence in a northeasterly direction along the western boundary of Madison County to the northwestern corner of said county; thence easterly along the northern boundary of said county to the northeast corner of said county; thence northerly along the western boundary of Henderson County to the northwest corner of said county; thence easterly along the northern boundary of said county to the northeast corner of said county; thence northerly along the western boundary of Decatur County to the northwest corner of said county; thence easterly along the northern boundary of said county to the Tennessee River; thence following the Tennessee River in a southerly direction to the southwest corner of the county of Perry; thence east along the southern boundary of Perry County to the southeast corner of said county; thence easterly along the northern boundary of Wayne County to the northeastern corner of said county; thence southerly along the eastern boundary of Wayne County to the boundary line of the State of Tennessee; thence easterly along the southern boundary of the said State to the western boundary of the State of North Carolina."

And whereas said quarantine line as above set forth is satisfactory to this Department, and legislation has been enacted by the State of Tennessee to enforce said quarantine line, therefore, in accordance with the regulations of February 1, 1896, the above quarantine line is adopted for the State of Tennessee by this Department for the period beginning on this date and ending November 15, 1896, in lieu of the quarantine line described in said order of February 1, 1896, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary.*

ORDER POSTPONING THE CERTIFICATION OF EXPORT BEEF TO MARCH 15, 1897.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 19, 1896.

Whereas section 2 of the act of Congress approved March 8, 1891,² as amended in the act approved March 2, 1895, provides as follows:

"SEC. 2. That the Secretary of Agriculture shall also cause to be made a careful inspection of all live cattle the meat of which, fresh, salted, canned, corned, packed, cured, or otherwise prepared, is intended for exportation to any foreign country, at such times and places and in such manner as he may think proper, with a view to ascertain whether said cattle are free from disease, and their meat sound and wholesome, and may appoint inspectors who shall be authorized to give an official certificate clearly stating the condition in which such cattle and meat are found, and no clearance shall be given to any vessel having on board any fresh, salted, canned, corned, or packed beef being the meat of cattle killed after the passage of this act for exportation to and sale in a foreign country from any port in the United States until the owner or shipper shall obtain from an inspector appointed under the provision of this act a certificate that said cattle were free from disease, and that their meat is sound and wholesome."

¹ See p. 397.

² See p. 345.

And whereas it has been found impossible to establish inspection prior to July 1, 1896, at all points where beef is prepared and packed for the export trade; and Whereas legislation is pending modifying the requirement for certificates with all exported beef;

It is ordered that the requirement of certificates shall be postponed until March 15, 1897. All orders and regulations of this Department inconsistent with this order are hereby revoked.

The greater part of the exported beef is now inspected and will be certified, and any Government desiring to secure inspected beef exclusively may do so by making the proper regulations. It is not, however, deemed practicable to exclude from exportation to countries which gladly accept it the beef which the retail butchers find unsalable because it is cut from inferior portions of the carcass. Much of this beef has been inspected, but there is no way of identifying it after the carcass has been cut. As a considerable number of firms collect these special cuts from the retailers and pack them for exportation, to enforce the statute as it stands would destroy their business. An amendment to the law which will avoid this undesirable result has been favorably reported from the proper committee in each branch of the Congress, and I deem it my duty to postpone the order requiring certificates until this bill has been duly considered and acted upon by the law-making power of the Government.

J. STERLING MORTON, *Secretary.*

INSTRUCTIONS FOR MICROSCOPISTS IN THE EXAMINATION OF PORK FOR TRICHINÆ.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY,
Washington, D. C., June 26, 1896.

The samples of pork submitted for microscopic examination shall be classified in three classes, as follows:

Class A.—Samples in which no signs of trichinæ, living or dead, or calcified cysts are found.

Class B.—Samples in which degenerate trichina cysts are found, but in which the body of the parasite is not recognizable.

Class C.—Samples in which recognizable bodies, living or dead, of trichinæ are found. All hogs belonging to this class must be condemned and disposed of according to section 20 of the regulations dated June 14, 1895.

An index figure (1, 2, 3) shall be added to designate the first, second, or third examination.

The following examinations and classifications shall be made:

FIRST EXAMINATION.

(a) All samples in which no signs of living or dead trichina bodies or of trichina cysts are found shall be marked A 1, and shall be submitted to a second examination.

(b) All samples in which degenerate trichina cysts are found, but in which the bodies of the parasites are not recognizable, shall be marked B 1, and shall be submitted to a second examination.

(c) All samples in which the bodies of either living or dead trichinæ are recognizable shall be marked C 1 and condemned.

SECOND EXAMINATION.

(d) All samples marked A 1 in which no living or dead trichina bodies or degenerate trichina cysts are found upon the second examination shall be marked A 1, A 2, and shall be passed as free from trichinæ and may be shipped to foreign countries.

(e) All samples marked A 1 in which degenerate cysts (but no living or dead trichina bodies) are found upon second examination shall be marked A 1, B 2, and submitted to a third examination.

(f) All samples marked A 1 in which the bodies of living or dead trichinæ are found upon second examination shall be marked A 1, C 2, and condemned.

(g) All samples marked B 1 in which no living or dead trichina bodies or degenerate trichina cysts are found upon second examination shall be marked B 1, A 2, and submitted to a third examination.

(h) All samples marked B 1 in which degenerate trichina cysts (but no living

or dead trichina bodies) are found shall be marked B 1, B 2, and the samples submitted to a third examination.

(i) All samples marked B 1 in which living or dead trichina bodies are found upon second examination shall be marked B 1, C 2, and condemned.

THIRD EXAMINATION.

(j) All samples marked A 1, B 2 in which no living or dead trichina bodies or degenerate trichina cysts are found upon third examination shall be marked A 1, B 2, A 3, and rejected for foreign markets but passed for home markets.

(k) All samples marked A 1, B 2 in which degenerate trichina cysts (but no living or dead trichina bodies) are found upon third examination shall be marked A 1, B 2, B 3, and rejected for foreign markets but passed for home markets.

(l) All samples marked A 1, B 2 in which living or dead trichina bodies are found upon third examination shall be marked A 1, B 2, C 3, and condemned.

(m) All samples marked B 1, B 2 in which no living or dead trichina bodies or degenerate trichina cysts are found upon third examination shall be marked B 1, B 2, A 3, and rejected for foreign markets but passed for home markets.

(n) All samples marked B 1, B 2 in which degenerate trichina cysts (but no living or dead trichina bodies) are found upon third examination shall be marked B 1, B 2, B 3, and rejected for foreign markets but passed for home markets.

(o) All samples marked B 1, B 2 in which living or dead trichina bodies are found upon third examination shall be marked B 1, B 2, C 3, and condemned.

NOTE.—By the term "foreign markets" is implied the countries requiring microscopic inspection of American pork, and by the term "home markets," the American market.

According to this system the following marks are possible:

A 1	Free upon first examination. Submit to second examination.
A 1, A 2	Free upon first and second examinations. Pass for foreign markets.
A 1, B 2	Free on first, cysts upon second examination. Submit to third examination.
A 1, B 2, A 3	Free on first, cysts on second, free on third examination. Reject for foreign markets; pass for home markets.
A 1, B 2, B 3	Free on first, cysts on second and third examinations. Reject for foreign markets; pass for home markets.
A 1, B 2, C 3	Free on first, cysts on second, trichina bodies on third examination. Condemn.
A 1, C 2	Free upon first, trichina bodies found upon second examination. Condemn.
B 1	Cysts upon first examination. Submit to second examination.
B 1, A 2	Cysts upon first, free upon second examination. Submit to third examination.
B 1, B 2	Cysts upon first and second examinations. Submit to third examination.
B 1, C 2	Cysts upon first, trichina bodies found upon second examination. Condemn.
B 1, A 2, A 3	Cysts upon first examination, free upon second and third examinations. Reject for foreign markets; pass for home markets.
B 1, A 2, B 3	Cysts upon first, free upon second, cysts upon third examination. Reject for foreign markets; pass for home markets.
B 1, A 2, C 3	Cysts upon first examination, free upon second, trichina bodies found upon third examination. Condemn.
B 1, B 2, A 3	Cysts upon first and second examinations, free upon third examination. Reject for foreign markets; pass for home markets.
B 1, B 2, B 2	Cysts upon first, second, and third examinations. Reject for foreign markets; pass for home markets.
B 1, B 2, C 3	Cysts upon first and second examinations, trichina bodies found upon third examination. Condemn.
C 1	Trichina bodies found upon first examination. Condemn according to section 20 of regulations dated June 14, 1895.

D. E. SALMON, *Chief of Bureau.*

**REGULATIONS FOR THE INSPECTION AND QUARANTINE OF
NEAT CATTLE, SHEEP, AND OTHER RUMINANTS, AND SWINE
IMPORTED INTO THE UNITED STATES.**

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., September 10, 1896.

It is hereby ordered that the order and regulations of February 11, 1895,¹ above mentioned, be, and the same are hereby, amended by the addition of the port of Boston, Mass., so as to read:

"SEC. 7. Cattle and sheep from the Dominion of Canada for export from the United States may be entered at the ports of Beecher Falls, Island Pond, and Richford, Vt., in bond for Portland, Me., and Boston, Mass., for export from the latter ports only; provided, said animals are accompanied by the health certificate and affidavits required by section 3; and provided further, that suitable pens are furnished by the railroad companies at the ports of entry and of export for their unloading and proper inspection."

The transportation companies carrying cattle or sheep in bond from Canada for Portland, Me., and Boston, Mass., for export have established at those points special stock yards for export cattle and sheep, and such yards are to be used for no other purpose.

WILLIS L. MOORE, *Acting Secretary.*

REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., September 22, 1896.

Notice is hereby given that cattle infested with the *Boophilus bovis*, or Southern cattle tick, disseminate the contagion of splenetic, or Southern, fever (Texas fever), and that under the laws relating to the control of contagious and infectious diseases of animals, the regulations of the Bureau of Animal Industry dated February 1, 1896,² are hereby amended by an additional section, as follows:

"Cattle originating outside of the district described by the order dated February 1, 1896, as amended by the orders of February 24, 1896,³ February 25, 1896,⁴ March 2, 1896,⁵ March 3, 1896,⁶ June 4, 1896,⁷ and June 5, 1896,⁸ and which are infested with the *Boophilus bovis* ticks, shall be considered as infectious cattle, and shall be subject to the rules and regulations governing the movement of Southern cattle."

Stock-yard companies receiving such cattle shall place the same in the pens set aside for the use of Southern cattle, and transportation companies are required to clean and disinfect all cars and vessels which have contained the same, according to the requirements of this Department.

CHAS. W. DABNEY, Jr.,
Acting Secretary.

**REGULATIONS FOR THE INSPECTION AND QUARANTINE OF
NEAT CATTLE, SHEEP, AND OTHER RUMINANTS, AND SWINE
IMPORTED INTO THE UNITED STATES.**

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., November 25, 1896.

It is hereby ordered that the order and regulations of February 11, 1895,¹ above mentioned, be, and the same are hereby, amended by the addition of St. Albans, Vt., as a port of entry, so as to read:

"SEC. 7. Cattle and sheep from the Dominion of Canada for export from the United States may be entered at the ports of Beecher Falls, Island Pond, Richford, and St. Albans, Vt., in bond, for Portland, Me., and Boston, Mass., for export from the two last-mentioned ports only, provided said animals are accompanied

¹ See p. 376.
² See p. 397.

³ See p. 399.
⁴ See p. 400.

⁵ See p. 401.
⁶ See p. 402.

⁷ See p. 403.
⁸ See p. 404.

by the health certificate and affidavits required by section 3, and provided further that suitable pens are furnished by the railroad companies at the ports of entry and of export for their unloading and proper inspection."

The transportation companies carrying cattle or sheep in bond from Canada for Portland, Me., and Boston, Mass., for export, have established at those points special stock yards for export cattle and sheep, and such yards are to be used for no other purpose. All such cattle and sheep shipped to Boston, Mass., must be unloaded only at the Mystic Wharf Stock Yards.

J. STERLING MORTON, *Secretary*.

REGULATIONS FOR THE SAFE TRANSPORT OF CATTLE FROM THE UNITED STATES TO FOREIGN COUNTRIES.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., January 9, 1897.

It is hereby ordered that paragraph "m," section 6, of the order and regulations of February 18, 1895,¹ be, and the same is hereby, amended to read as follows:

"(m) *Planking of shelter deck to be erected on all exposed decks.*—The planks to form the shelter deck, which must be erected on all exposed decks, shall be laid with 2-inch sound spruce or yellow pine lumber or with 1½-inch sound spruce or yellow pine lumber, if tongued and grooved, sufficient to cover cattle. These planks shall be laid as closely as possible and well nailed to the beams, thus making a good deck from which to work the ship's gear."

J. STERLING MORTON, *Secretary*.

REGULATIONS FOR THE INSPECTION AND QUARANTINE OF ANIMALS IMPORTED FROM CANADA INTO THE UNITED STATES.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., January 23, 1897.

In pursuance of sections 7, 8, and 10 of the act of Congress entitled "An act providing for the inspection of meats for exportation, and prohibiting the importation of adulterated articles of food or drink, and authorizing the President to make proclamation in certain cases, and for other purposes," approved August 30, 1890,² and of an act of Congress entitled "An act making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1897," the following regulations, to take effect from and after February 1, 1897, are hereby prescribed for the inspection and quarantine of animals imported from Canada into the United States, and all orders and regulations or parts thereof inconsistent with these regulations are hereby revoked in so far as applies to inspection and quarantine of animals imported from Canada:

1. With the approval of the Secretary of the Treasury, the following-named ports along the border or boundary line between the United States and Canada have been designated as quarantine stations, and all animals imported from Canada into the United States for which inspection is required by these regulations must be entered through these ports, viz: Vanceboro and Houlton, Me.; Beechers Falls, Island Pond, Newport, Richford, and St. Albans, Vt.; Rouse Point, Ogdensburg, Charlotte, Suspension Bridge, and Buffalo, N. Y.; Port Huron and Detroit, Mich.; Duluth and St. Vincent, Minn.; and Port Townsend, Wash.

2. The word "animals" when used in these regulations refers to and includes all or any of the following kinds: Horses, neat cattle, sheep, and other ruminants, and swine. The term "contagious diseases" when used in these regulations includes and applies to all or any of the following diseases: Glanders and farcy, *maladie du coït*, anthrax, contagious pleuro-pneumonia, Texas, or splenic fever, tuberculosis, actinomycosis, foot-and-mouth disease, rinderpest, sheep pox, foot rot, sheep scab, hog cholera, swine plague, and erysipelas. Animals found affected with any one of these contagious diseases must be returned to Canada or killed without compensation.

¹ See p. 379.

² See p. 335.

3. All animals imported into the United States from Canada must be accompanied by an affidavit, made by the owner or importer, declaring clearly the purpose for which said animals are imported, viz, whether for breeding purposes, for milk production, for work animals, for grazing, feeding, or slaughter, or whether they form part of settlers' effects, or whether they are horses entered for temporary stay, as provided in section 7 of these regulations. Said affidavit must be presented to the collector of customs at the port of entry, who will decide whether the animals are entitled to entry under these regulations, and who will notify the inspector of the Bureau of Animal Industry in all cases where these regulations require an inspection to be made.

4. All animals imported into the United States for breeding purposes, for milk production, for grazing or feeding, horses for work, and swine for slaughter must be inspected by an inspector of the Bureau of Animal Industry at the port of entry. All animals covered by this section except horses, and swine for slaughter, must be accompanied with a certificate signed by a Canadian official veterinarian, stating that no contagious disease, except tuberculosis and actinomycosis in cattle, affecting the species of animals imported, has existed in the district in which the animals have been kept for six months preceding the date of importation, excepting animals which are part of settlers' effects or belonging to Indian tribes, which may be entered without certification or inspection. The owner or importer must present an affidavit that said certificate refers to the animal or animals imported. The certificate for cattle for breeding and for milch cows must also show that they have been submitted to the tuberculin test and found free from tuberculosis, giving the date of testing, with the chart of reaction and a description of the cattle, with age and markings. All animals imported for breeding purposes, milk production, grazing or feeding, when not accompanied by the required affidavits and certificates, must be detained in quarantine for one week, at the expense of the owner or importer, under the supervision of the inspector in charge. During this detention a rigid inspection will be made, and the cattle for breeding or milk production will be tested with tuberculin. Animals found free from disease at the end of this period will be released. Cattle and sheep for grazing or feeding, if accompanied by the required affidavits and certificates, need not be unloaded for inspection, but all other animals covered by this section must be unloaded and carefully inspected.

5. All Canadian animals will be admitted at any port of the United States for transit in bond to any Canadian port without inspection.

6. Cattle and sheep in bond for export will be admitted without inspection at any of the ports named in section 1 in transit to and for export from Portland, Me., Boston, Mass., and New York, N. Y. Horses will be admitted in bond at any port of the United States without inspection for export from any port of the United States. All animals admitted for export will be subject to inspection at port of export.

7. Horses for temporary stay, whether for pleasure driving, teaming, exhibition, racing, or used in connection with stock raising or mining, cattle and sheep for slaughter, and animals belonging to Indian tribes or forming part of settlers' effects will be admitted through any port without inspection or certification.

8. The railroad cars used in the transportation of animals specified by these regulations must be thoroughly cleaned and disinfected before said animals are placed therein. All litter from previous shipments must be removed, and the car white-washed with lime and carbolic acid, one pound of commercial carbolic acid to five gallons of lime wash. Unless this regulation is complied with, Canadian animals will not be allowed entry into the United States and animals from the United States will not be admitted into Canada. Shippers should see that cars are properly cleaned and disinfected before animals are loaded.

J. STERLING MORTON, *Secretary.*

REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., January 27, 1897.

To the managers and agents of railroads and transportation companies of the United States, stockmen, and others:

In accordance with section 7 of the act of Congress approved May 29, 1884,¹ entitled "An act for the establishment of a Bureau of Animal Industry, to prevent

¹ See Report of Bureau for 1884, p. 473.

the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals,' and of the act of Congress which became a law April 24, 1896, making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1897, you are hereby notified that a contagious and infectious disease known as splenic, or Southern, fever exists among cattle in the following described area:

All that country lying south or below a line beginning at the northwest corner of the State of California; thence east, south, and southeasterly along the boundary line of said State of California to the southeastern corner of said State; thence southerly along the western boundary line of Arizona to the southwest corner of Arizona; thence along the southern boundary lines of Arizona and New Mexico to the southeastern corner of New Mexico; thence northerly along the eastern boundary of New Mexico to the southern line of the State of Colorado; thence along the southern boundary lines of Colorado and Kansas to the southeastern corner of Kansas; thence southerly along the western boundary line of Missouri to the southwestern corner of Missouri; thence easterly along the southern boundary line of Missouri to the Mississippi River; thence northerly along the Mississippi River to the northern boundary line of Tennessee at the northwest corner of Lake County; thence easterly along said northern boundary line to the northeast corner of Henry County; thence in a northerly direction along the boundary of the Tennessee River to the northwest corner of Stewart County; thence in an easterly direction along the northern boundary of Tennessee to the southwestern corner of Virginia; thence northeasterly along the western boundary line of Virginia to the northernmost point of Virginia; thence southerly along said boundary line to the northeast corner of Virginia where it joins the southeastern corner of Maryland, at the Atlantic Ocean.

Whenever any State or Territory located above or below said quarantine line, as above designated, shall duly establish a different quarantine line, and obtain the necessary legislation to enforce said last-mentioned line strictly and completely within the boundaries of said State or Territory, and said last above-mentioned line and the measures taken to enforce it are satisfactory to the Secretary of Agriculture, he may, by a special order, temporarily adopt said State or Territorial line.

Said adoption will apply only to that portion of said line specified, and may cease at any time the Secretary may deem it best for the interest involved, and in no instance shall said modification exist longer than the period specified in said special order; and at the expiration of such time said quarantine line shall revert without further order to the line first above described.

Whenever any State or Territory shall establish a quarantine line for above purposes, differently located from the above-described line, and shall obtain by legislation the necessary laws to enforce same completely and strictly, and shall desire a modification of the Federal quarantine line to agree with such State or Territorial line, the proper authorities of such State or Territory shall forward to the Secretary of Agriculture a true map or description of such line and a copy of the laws for enforcement of same, duly authenticated and certified.

Such States or Territories as now have a line established as last above mentioned can immediately forward certified copies of said line and laws for the enforcement thereof, and if satisfactory to the Secretary of Agriculture, the same may be adopted at once and the Federal line so modified.

From the 15th day of February to the 15th day of November, inclusive, during each year, no cattle are to be transported from said area south or below said Federal quarantine line above described to any portion of the United States above, north, east, or west of the above-described line, except by rail for immediate slaughter, and when so transported the following regulations must be observed:¹

1. When any cattle in course of transportation from said area are unloaded above, north, east, or west of this line to be fed or watered, the places where said cattle are to be fed or watered shall be set apart and no other cattle shall be admitted thereto.

2. On unloading said cattle at their points of destination, pens, sufficiently isolated, shall be set apart to receive them, and no other cattle shall be admitted to said pens; and the regulations relating to the movement of cattle from said area, prescribed by the cattle sanitary officers of the State where unloaded, shall be carefully observed. The cars that have carried said stock shall be cleansed and disinfected as soon as possible after unloading and before they are again used to transport, store, or shelter animals or merchandise.

¹ See modification with reference to Texas, p. 411; Arkansas, p. 412; Oklahoma, pp. 413 and 417; North Carolina, p. 414; Virginia, p. 413; Tennessee, p. 414; California, p. 417.

3. All cars carrying cattle from said area shall bear placards stating that said cars contain Southern cattle, and each of the waybills of said shipments shall have a note upon its face with a similar statement. Whenever any cattle have come from said area and shall be reshipped from any point at which they have been unloaded to other points of destination, the cars carrying said animals shall bear similar placards with like statements, and the waybills be so stamped. At whatever point these cattle are unloaded they must be placed in separate pens, to which no other cattle shall be admitted.

4. The cars and boats used to transport such animals, the chutes, alleyways, and pens used during transportation, and at points of destination, shall be disinfected in the following manner:

- (a) Remove all litter and manure. This litter and manure may be disinfected by mixing it with lime or saturating it with a 5 per cent solution of carbolic acid; or, if not disinfected, it may be stored where no cattle can come into contact with it until after November 15.
- (b) Wash the cars and the feeding and watering troughs with water until clean.
- (c) Saturate the walls and floors of the cars, and fencing, troughs, and chutes of the pens with a solution made by dissolving 4 ounces of chloride of lime to each gallon of water; or disinfect the cars with a jet of steam under a pressure of not less than 50 pounds to the square inch.

Cattle from the Republic of Mexico may be admitted into the United States to remain below said Federal quarantine line after inspection, according to law, but said cattle shall not be permitted to cross said quarantine line otherwise than by rail for immediate slaughter, except by special permit from the inspectors of the Bureau of Animal Industry, issued according to the regulations of the said Bureau, and no permit shall be issued except for cattle free from splenic, or Texas, fever, or from contact therewith during the three months preceding the issuance of said permit, and which have been grazed in a locality free from infection of such fever.

Notice is hereby given that cattle infested with the *Boophilus bovis*, or Southern cattle tick, disseminate the contagion of splenic, or Southern, fever (Texas fever); therefore cattle originating outside of the district described by this order, or amendments thereof, and which are infested with the *Boophilus bovis* ticks, shall be considered as infectious cattle and shall be subject to the rules and regulations governing the movement of Southern cattle.

Stock-yards companies receiving such cattle shall place the same in the pens set aside for the use of Southern cattle, and transportation companies are required to clean and disinfect all cars and vessels which have contained the same, according to the requirements of this Department.

The losses which formerly occurred to the owners of susceptible cattle, both in the interstate and export trade, by the contraction of this disease from exposure in unclean and infected cars and pens, and by means of the manure carried in unclean cars from place to place, became a matter of grave and serious concern to the cattle industry of the United States until this danger was removed by the inspection of this Department. It is absolutely essential, therefore, that this cattle industry should continue to be protected as far as possible by separating the dangerous cattle and by the adoption of efficient methods of disinfection.

Inspectors are instructed to see that disinfection is properly done, and it is expected that transportation and stock-yards companies will promptly put into operation the above methods.

All prior orders conflicting herewith are hereby revoked.

J. STERLING MORTON, *Secretary*.

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF TEXAS.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., January 28, 1897.

In accordance with the regulations concerning cattle transportation issued by this Department January 27, 1897, the State of Texas has located a quarantine line as follows:

"Beginning at the intersection of the southern boundary of New Mexico with

¹ See p. 409.

the international boundary line at the Rio Grande River; thence southeasterly along the said international boundary line to the southwest corner of the county of Pecos; thence following the western boundary of Pecos County to the southeast corner of Reeves County; thence following the boundary line between the counties of Pecos and Reeves to the Pecos River; thence southeasterly, following the Pecos River, to the northwest corner of Crockett County; thence easterly along the northern boundary of Crockett and Schleicher counties to the southeastern corner of Irion County; thence northerly along the eastern boundary of Irion County to the northeast corner of said county; thence northerly to the southern boundary of Coke County; thence westerly to the southwest corner of Coke County; thence northerly along the western boundary of Coke County to the southern boundary of Mitchell County; thence easterly to the southeastern corner of Mitchell County; thence northerly along the western boundary of Nolan County to the northwestern corner of Nolan County; thence easterly along the northern boundaries of Nolan and Taylor counties to the southeast corner of Jones County; thence northerly along the eastern boundary of Jones County to the northeast corner of said county; thence easterly along the northern boundary of Shackelford County to the southwest corner of Throckmorton County; thence northerly along the western boundaries of Throckmorton and Baylor counties to the northwest corner of Baylor County; thence easterly along the northern boundary of said county to the southeast corner of Wilbarger County; thence northerly along the eastern boundary of Wilbarger County to the Red River; thence continuing in a northwesterly direction along the course of said river to the southeast corner of Greer County; thence northerly, following the course of the North Fork of the Red River, to its intersection with the eastern boundary line of Wheeler County; thence north with the eastern boundary line of Wheeler, Hemphill, and Lipscomb counties to the northeast corner of Lipscomb County; thence in a westerly direction with the northern boundary lines of Lipscomb, Ochiltree, Hansford, Sherman, and Dallam counties to the northwestern corner of Dallam County to the eastern line of New Mexico."

And whereas said quarantine line, as above set forth, is satisfactory to this Department, and legislation has been enacted by the State of Texas to enforce said quarantine line, therefore, in accordance with the regulations of January 27, 1897,¹ the above quarantine line is adopted for the State of Texas by this Department, for the period beginning on February 15, 1897, and ending November 15, 1897, in lieu of the quarantine line described in said order of January 27, 1897, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary*.

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF ARKANSAS.

U. S. DEPARTMENT OF AGRICULTURE,

OFFICE OF THE SECRETARY.

Washington, D. C., February 2, 1897.

In accordance with the regulations concerning cattle transportation issued by this Department January 27, 1897,¹ the State of Arkansas has located a quarantine line, described as follows:

"Beginning at the northwest corner of the county of Benton; thence southerly along the western boundary line of Benton and Washington counties to the southwest corner of Washington County; thence easterly along the southern boundaries of the counties of Washington, Madison, Newton, Searcy, and Stone to the western boundary of Independence County; thence southerly along the western boundary of Independence County to the southwest corner of Independence County; thence easterly along the southern boundary of Independence County to the southeast corner of Independence County; thence northerly along the eastern boundary of said county to the northeast corner of said county; thence easterly along the southern boundary of Lawrence County to the southeast corner of said county; thence northerly along the eastern boundary of said county to the southwestern corner of Greene County; thence easterly along the southern boundary of Greene County to the southern boundary of the State of Missouri and along said southern boundary of the State of Missouri to the Mississippi River."

And whereas said quarantine line, as above set forth, is satisfactory to this Department, and legislation has been enacted by the State of Arkansas to enforce said quarantine line; therefore, in accordance with the regulations of January 27,

¹ See p. 409.

1897, the above quarantine line is adopted for the State of Arkansas by this Department for the period beginning on February 15, 1897, and ending November 15, 1897, in lieu of the quarantine line described in said order of January 27, 1897, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary.*

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE TERRITORY OF OKLAHOMA.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 2, 1897.

In accordance with the regulations concerning cattle transportation issued by this Department January 27, 1897,¹ the Territory of Oklahoma has located a quarantine line,² described as follows:

"Beginning on the Red River at the southeastern corner of the county of Greer; thence northerly following the course of the North Fork of the Red River to its intersection with the southern boundary line of Roger Mills County; thence easterly along the southern boundary of Roger Mills and Washita counties to the southeastern corner of Washita County; thence northerly along the eastern boundary of Washita County to the northeast corner of said county; continuing in a northerly direction along the eastern boundary of the county of G to the southwestern corner of the county of Blaine; thence easterly along the southern boundary of Blaine County to the southeast corner of said county; thence north along the eastern boundary of said county to the northwest corner of Canadian county; thence east along the northern boundary of said county to the northeast corner of said county; thence north along the eastern boundary of Kingfisher County to the northeastern corner of said county; thence east along the southern boundary of O County to the southeast corner of said county; thence north along the eastern boundary of O County to the northeast corner of said county; thence east along the southern boundary of K County to the west line of the Ponca Indian Reservation; thence north along the west line of said reservation to the northwest corner of said reservation; thence east along the northern boundary of the Ponca Reservation to the Arkansas River; thence in a northerly direction following the course of said river to its intersection with the thirty-seventh parallel of north latitude at the southern boundary line of Kansas."

So much of the quarantine line for the State of Texas described in the order of January 28, 1897,³ beginning at a point on the Red River at its intersection with the southern boundary line of Roger Mills County, and extending northerly and westerly therefrom, is hereby revoked during the enforcement of the above line for the Territory of Oklahoma.

And whereas said quarantine line, as above set forth, is satisfactory to this Department, and legislation has been enacted by the Territory of Oklahoma to enforce said quarantine line; therefore, in accordance with the regulations of January 27, 1897, the above quarantine line is adopted for the Territory of Oklahoma by this Department for the period beginning on February 15, 1897, and ending November 15, 1897, in lieu of the quarantine line described in said order of January 27, 1897, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary.*

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF VIRGINIA.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 5, 1897.

In accordance with the regulations concerning cattle transportation issued by this Department January 27, 1897,¹ the State of Virginia has located a quarantine line, described as follows:

"Beginning at the boundary line of Virginia at its southwestern corner; thence easterly along the southern boundary of Virginia to a point coinciding with the summit of the Blue Ridge Mountains; thence following the summit of said mountains northeasterly to the Blackwater River; thence easterly along the course of

¹ See p. 400.

² See modification on p. 417.

³ See p. 411.

said river through Franklin County to its intersection with the Staunton River on the eastern boundary of Franklin County; thence in an easterly direction along the southern and eastern boundaries of Bedford County to the James River; thence following the James River to the southeastern corner of Charles City County; thence northerly and easterly along the western and northern boundaries of James City, Gloucester, and Mathews counties to the Chesapeake Bay; thence south to the northern boundary of Elizabeth City County; thence west and north along the boundaries of Elizabeth City and Warwick counties to the James River; thence southeasterly along the course of the said river to the northwest corner of Norfolk County; thence south along the western boundary of said county to its intersection with the northern boundary of North Carolina; thence east along the southern boundaries of Norfolk and Princess Anne counties to the Atlantic Ocean."

And whereas said quarantine line, as above set forth, is satisfactory to this Department, and legislation has been enacted by the State of Virginia to enforce said quarantine line; therefore, in accordance with the regulations of January 27, 1897, the above quarantine line is adopted for the State of Virginia by this Department for the period beginning on February 15, 1897, and ending November 15, 1897, in lieu of the quarantine line described in said order of January 27, 1897, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary*.

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF NORTH CAROLINA.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 5, 1897.

In accordance with the regulations concerning cattle transportation issued by this Department January 27, 1897,¹ the State of North Carolina has located a quarantine line, described as follows:

"Beginning at the northwestern corner of Ashe County, at the northern boundary of North Carolina; thence along the western boundary of said State to the southwest corner of the county of Cherokee; thence along the southern boundaries of the counties of Cherokee, Clay, Macon, Jackson, and Transylvania to the southeast corner of the county of Transylvania; thence northwesterly along the eastern boundary of Transylvania County to the southwest corner of the county of Buncombe; thence easterly along the southern boundary of the said county to the summit of the Blue Ridge Mountains; thence in a northeasterly direction following the said mountains to their intersection with the northern boundary of the State of North Carolina."

So much of the quarantine line for the State of Virginia, described in the order of February 5, 1897,² beginning at the northwestern corner of Ashe County and extending easterly along the southern boundary of Virginia to the summit of the Blue Ridge Mountains, is hereby revoked during the enforcement of the above line for the State of North Carolina.

And whereas said quarantine line, as above set forth, is satisfactory to this Department, and legislation has been enacted by the State of North Carolina to enforce said quarantine line; therefore, in accordance with the regulations of January 27, 1897, the above quarantine line is adopted for the State of North Carolina by this Department for the period beginning on February 15, 1897, and ending November 15, 1897, in lieu of the quarantine line described in said order of January 27, 1897, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary*.

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF TENNESSEE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 10, 1897.

In accordance with the regulations concerning cattle transportation issued by this Department January 27, 1897,¹ the State of Tennessee has located a quarantine line, described as follows:

"Beginning on the Mississippi River at the southeast corner of the State of

¹ See p. 400.

² See p. 413.

Missouri at the western boundary of Tennessee; thence southerly along the western boundaries of the counties of Dyer, Lauderdale, and Tipton to the northwest corner of the county of Shelby on the bank of the Mississippi River; thence along the northern boundary of the said county to the northeast corner of said county; thence northerly along the western boundary of Fayette County to the northwest corner of Fayette County; thence easterly along the northern boundary of Fayette County to the northeast corner of said county; thence northerly along the western boundary of Hardeman County to the northwest corner of said county; thence easterly along the southern boundary of Haywood County to the southeast corner of said county; thence northerly along the eastern boundary of Haywood County to the northeast corner of said county; thence in a northeasterly direction along the western boundary of Madison County to the northwest corner of said county; thence easterly along the northern boundary of said county to the northeast corner of said county; thence northerly along the western boundary of Henderson County to the northwest corner of said county; thence easterly along the northern boundary of said county to the northeast corner of said county; thence northerly along the western boundary of Decatur County to the northwest corner of said county; thence easterly along the northern boundary of said county to the Tennessee River; thence following the Tennessee River in a southerly direction to the southwest corner of Perry County; thence east along the southern boundary of Perry County to the southeast corner of said county; thence easterly along the northern boundary of Wayne County to the northeast corner of said county; thence southerly along the eastern boundary of Wayne County to the boundary line of the State of Tennessee; thence easterly along the southern boundary of the said State to the western boundary of the State of North Carolina."

So much of the quarantine line for the State of Virginia, described in the special order of February 5, 1897,¹ beginning at the boundary line of Virginia at its southwest corner; thence easterly along the southern boundary of Virginia to its intersection with the northern boundary of North Carolina at the northwest corner of Ashe County; and so much of the quarantine line for the State of North Carolina, described in the special order of February 5, 1897,² beginning at the northwest corner of Ashe County at the northern boundary of North Carolina; thence along the western boundary of said State to the southwest corner of the county of Cherokee at the southwest corner of said State, are hereby revoked during the enforcement of the above line for the State of Tennessee.

And whereas said quarantine line, as above set forth, is satisfactory to this Department, and legislation has been enacted by the State of Tennessee to enforce said quarantine line; therefore, in accordance with the regulations of January 27, 1897, the above quarantine line is adopted for the State of Tennessee by this Department for the period beginning on February 15, 1897, and ending November 15, 1897, in lieu of the quarantine line described in said order of January 27, 1897, for said area, unless otherwise ordered.

J. STERLING MORTON, *Secretary*.

REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., February 19, 1897.

FEEDING STATION AT FORT WORTH, TEX.

Notice is hereby given that cattle originating outside, north and west, of the quarantine line in the State of Texas, and which are to be transported by rail through the quarantined district, may be unloaded for rest, feed, and water into specially prepared pens at Union Stock Yards, Fort Worth, Tex., providing that the cattle are free from Southern cattle ticks and have not been unloaded at any other place within the quarantine district. They may, after unloading into said pens, be reloaded into the same cars from which unloaded, or into other clean cars, and reshipped as uninfected cattle.

It is ordered that the orders and regulations dated January 27, 1897,³ and January 28, 1897,⁴ be hereby amended to conform with the above-mentioned regulations.

J. STERLING MORTON, *Secretary*.

¹ See p. 413.

² See p. 414.

³ See p. 400.

⁴ See p. 411.

[B. A. I. ORDER No. 1.]

ORDER CONCERNING THE EXPORTATION OF BEEF.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., March 9, 1897.

Whereas section 2 of the act of Congress approved March 3, 1891, as amended in the act approved March 2, 1895, provides as follows:

"SEC. 2. That the Secretary of Agriculture shall also cause to be made a careful inspection of all live cattle the meat of which, fresh, salted, canned, corned, packed, cured, or otherwise prepared, is intended for exportation to any foreign country, at such times and places, and in such manner as he may think proper, with a view to ascertain whether said cattle are free from disease and their meat sound and wholesome, and may appoint inspectors who shall be authorized to give an official certificate clearly stating the condition in which such cattle and meat are found, and no clearance shall be given to any vessel having on board any fresh, salted, canned, corned, or packed beef, being the meat of cattle killed after the passage of this act, for exportation to and sale in a foreign country from any port in the United States until the owner or shipper shall obtain from an inspector appointed under the provision of this act a certificate that said cattle were free from disease and that their meat is sound and wholesome."

And whereas the order of the Secretary of Agriculture of August 28, 1895,¹ for carrying out the provisions of this section was postponed to March 15, 1897—

It is ordered that from and after March 15, 1897, all beef offered for transportation to European ports, whether fresh, salted, canned, corned, or packed, being the meat of cattle killed after the passage of the act under which this order is made, shall be accompanied by a certificate issued by an inspector of this Department, showing that the cattle from which it was produced were free from disease and the meat sound and wholesome; and in order that it may be determined whether all beef exported to European ports has been so inspected and found to be wholesome it is further ordered that the meat of all other species of animals exported to such ports, which for any reason does not bear the inspection stamps of this Department, shall be packed in barrels, cases, or other packages which are legibly marked in such manner as to clearly indicate the species of animal from which the meat was produced. Meat which is not so marked, and which is not accompanied by a certificate of inspection, will be classed as uninspected beef, and will not be allowed exportation to European ports.

Notice is hereby given to exporters of meat, whether said meat is fresh, salted, canned, corned, packed, or otherwise prepared, and to owners and agents of the vessels upon which said meat is exported, that no clearance can be given to any vessel having on board said meat until the provisions of this order are complied with.

Until otherwise ordered, certificates will not be required with beef exported to other than European countries.

JAMES WILSON, *Secretary.*

CONCERNING TRANSPORTATION OF CATTLE.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., March 17, 1897.

NOTICE.

To all railroad companies transporting cattle within the United States:

The attention of the officers of all railroad companies engaged in the transportation of live stock from one State or Territory into another, or whose roads form any part of a line of road transporting live stock from one State or Territory into another, is directed to the following sections of the Revised Statutes hereto annexed,² viz, sections 4386, 4387, 4388, and 4389.

Complaint has been made to this Department, by its officers supervising the movement of animals in the interstate and export trade, that the provisions of the foregoing sections are not complied with by many railroad companies, and

¹ See p. 301.

² For text see p. 332.

that cattle and other live stock are confined in cars for a period exceeding twenty-eight hours, and that at times when they are unloaded they are not allowed the five consecutive hours for rest required by statute.

The failure of the railroad companies to conform to this law causes animals great suffering while in transit to points of destination, which it is the intent of the law to prevent. Railroad companies will therefore make such arrangements as are necessary in their train service, and provide the necessary feeding and watering stations to comply with the above-named sections of the Revised Statutes, and any failure to do this will render them liable, on conviction, to the penalty provided in section 4388.

JAMES WILSON, *Secretary*.

[B. A. I. ORDER No. 2.]

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE STATE OF CALIFORNIA.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., March 19, 1897.

In accordance with the regulations concerning cattle transportation issued by this Department January 27, 1897,¹ the State of California has located a quarantine line described as follows:

"Beginning on the northern boundary of the State at Rhett Lake, at the northwest corner of Modoc County; thence south and east along the western and southern boundaries of said county to the northwest corner of Lassen County; thence south along the western boundary of said county to the northern boundary of Plumas County; thence west and south and southeast along the boundary of said county to the western boundary line of Sierra County; thence following the western and southern boundaries of said county to the intersection with the State boundary line."

And whereas said quarantine line as above set forth is satisfactory to this Department, and legislation has been enacted by the State of California to enforce said quarantine line; therefore, in accordance with the regulations of January 27, 1897, the above quarantine line is adopted for the State of California by this Department for the period beginning on this date and ending November 15, 1897, in lieu of the quarantine line described in said order of January 27, 1897, for said area, unless otherwise ordered.

JAMES WILSON, *Secretary*.

[B. A. I. ORDER No. 3.]

SPECIAL ORDER MODIFYING QUARANTINE LINE FOR THE TERRITORY OF OKLAHOMA.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., April 26, 1897.

In accordance with the regulations concerning cattle transportation issued by this Department January 27, 1897,¹ the "Special order modifying quarantine line for the Territory of Oklahoma," dated February 2, 1897,² is hereby amended, in order to place Canadian County north of the quarantine line, as follows:

"Beginning at the southeast corner of Blaine County, on the Canadian River, at the quarantine line established February 2, 1897; thence southeast along the southern boundary of Canadian County to the southeast corner thereof; thence north along the eastern boundary of said county to the northeast corner of said county, joining the quarantine line established February 2, 1897."

That portion of the quarantine line for the western and northern boundaries of Canadian County established February 2, 1897, is hereby withdrawn.

J. H. BRIGHAM, *Acting Secretary*.

¹ See p. 400.

² See p. 413.

[B. A. I. ORDER No. 4.]

REGULATIONS CONCERNING CATTLE TRANSPORTATION.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., May 17, 1897.

Notice is hereby given to the managers and agents of all steamboats and vessels of all descriptions that the regulations dated January 27, 1897,¹ are hereby amended so as to include all vessels which may hereafter carry cattle from the district described in said order, as amended January 28,² February 2,³ 5,⁴ and 10,⁵ March 19,⁶ and April 26,⁷ 1897, to points north, east, and west of said district; and it is further ordered that no vessel having on board cattle from said district shall receive on board cattle from outside of said district.

It is also ordered that cattle from said district shall not be received on board when destined to points outside of said district where proper facilities have not been provided for transferring the said cattle from the landing to the stock yards and slaughterhouses without passing over public highways, unless permission for such passing is first obtained from the local authorities.

JAMES WILSON, *Secretary.*

[B. A. I. ORDER No. 5.]

TRANSPORTATION OF SHEEP AFFECTED WITH SCABIES.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, D. C., June 18, 1897.

To the managers and agents of railroads and transportation companies of the United States, stockmen, and others:

In accordance with section 7 of the act of Congress approved May 29, 1884,¹ entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide means for the suppression and extirpation of pleuro-pneumonia and other contagious diseases among domestic animals," and of the act of Congress approved April 23, 1897, making appropriation for the Department of Agriculture for the fiscal year ending June 30, 1898, you are hereby notified that the contagious disease known as sheep scab, or scabies of sheep, exists among sheep in the United States, and that it is a violation of the law to receive for transportation, or transport any stock affected with said disease from one State or Territory to another, or from any State into the District of Columbia, or from the District into any State. It is also a violation of the law for any person, company, or corporation to deliver for such transportation to any railroad company, or master, or owner of any boat or vessel, any sheep, knowing them to be affected with said disease; and it is also unlawful for any person, company, or corporation to drive on foot or transport in private conveyance from one State or Territory to another, or from any State into the District of Columbia, or from the District into any State, any sheep, knowing them to be affected with said disease. All transportation companies and individuals shipping, driving or transporting sheep are requested to cooperate with this Department in enforcing the law for preventing the spread of the said disease. Inspectors of the Bureau of Animal Industry are directed to report all violations of this act which come to their attention.

In order to more effectually accomplish the object of the above-mentioned laws, it is hereby ordered that any railroad cars, boats, or other vehicles, which have been used in the transportation of sheep affected with said disease, shall be immediately cleaned and disinfected by the owners or by the transportation companies in whose possession said cars or vehicles may be at the time the animals are unloaded, by first removing all litter and manure which they contain, and then saturating the woodwork with a 5 per cent solution of crude carbolic acid in water. Inspectors of the Bureau of Animal Industry are directed to see that this order is carried into effect.

JAMES WILSON, *Secretary.*

¹ See p. 409.² See p. 412, 413.³ See p. 414.⁴ See p. 417.⁵ See p. 411.⁶ See p. 413, 414.⁷ See p. 417.⁸ See Report of Bureau for 1894, p. 473.

LAWS OF STATES AND TERRITORIES FOR THE CONTROL OF CONTAGIOUS ANIMAL DISEASES.

ALABAMA.

Destruction of abandoned animals. SEC. 422. An agent, officer, or member of a duly incorporated society for the prevention of cruelty to animals, may lawfully destroy, or cause to be destroyed, any animals found abandoned and not properly cared for, which may appear in the judgment of two reputable citizens called by him to view the same in his presence, to be superannuated, infirm, glandered, injured, or diseased past recovery for any useful purpose.

Code of 1896.

ARIZONA.

AN ACT to amend act No. 58, Seventeenth Legislative Assembly, entitled: "Providing for the inspection of and regulating the slaughtering of animals for sale in the Territory of Arizona."

Be it enacted by the Legislative Assembly of the Territory of Arizona:

Appointment of stock inspectors. SECTION 1. The Live Stock Sanitary Commission of the Territory of Arizona, on petition therefor, signed by at least five persons, each of whom are engaged in the business of owning and breeding neat cattle in the Territory of Arizona, shall have power to and shall appoint live-stock inspectors to reside in or near each city, town, or village, or at any point where cattle are slaughtered in the Territory of Arizona, who shall hold office at the will and pleasure of the commission. No person or persons engaged or employed in the butchering business shall be eligible to hold the office of inspector under this act.

Bond of inspector. SEC. 2. Any person who shall receive an appointment to the office of inspector under this act, before entering upon the performance of his duties, shall take the oath of office prescribed by law, and shall file a bond in the sum of five hundred dollars with the county recorder in the county of his district, executed by himself, and with two good and sufficient sureties, to the Territory of Arizona, which must be approved by the board of supervisors of such county, conditioned upon the faithful performance by him or by his regularly appointed deputy, of the duties of his office.

Slaughterhouse. SEC. 3. Any person or persons, firm, or corporation, engaged in the slaughtering of neat and horned cattle for sale in any city, town, or village in the Territory of Arizona, shall slaughter all such animals in a fixed and definite slaughterhouse or slaughter pen, to be kept by such person or persons for that purpose; said slaughterhouse or slaughter place must be within four miles from the limits of said city, town, or village.

Location of slaughterhouse, etc. SEC. 4. It shall be the duty of any person, persons, firm, or corporation, carrying on the business of slaughtering said animals, to notify and acquaint the nearest live-stock inspector appointed under this act, of the location of his or their slaughterhouse or slaughter place, and of the time and times when such person or persons propose to slaughter any neat or horned cattle.

Supervision of slaughtering places. SEC. 5. It shall be the duty of the live-stock inspector appointed under this act, to keep a general supervision of such slaughtering places, to notify the chairman of the commission and the district attorney of the proper county, of any person, persons, firm, or corporation, who is, or are evading any of the provisions of this act, to personally, or by regularly appointed deputy, inspect and brand the hides of all neat or horned cattle slaughtered for sale in their respective districts, branding them on the left side of the neck with a brand furnished by the commission,

and shall receive as compensation therefor the sum of twenty-five cents for each hide of neat or horned cattle inspected and branded, to be paid as hereinafter provided; to keep a record of their general description of their marks and brands, ages and sex of all such slaughtered animals, as determined by examination of the hide and horns, in a book to be kept by him for that purpose. Said book shall at all times be open for inspection to any person desiring to inspect the same. A duplicate record of all inspection shall be sent to the secretary of the commission at such times and under such rules and regulations as the commission may adopt.

Compensation for inspection. SEC. 6. Any person, persons, firm, or corporation who shall offer for sale for slaughtering purposes any neat or horned cattle shall first cause the animals to be inspected, and shall immediately pay to the live-stock inspector who inspects the same the sum of twenty-five cents for each animal so inspected when the number is ten or less. When it is more than ten or less than twenty-five, the fee for inspecting shall be fifteen cents per head, and for all animals over twenty-five head, the fee shall be ten cents per head, and the inspector shall furnish to the person, persons, firm, or corporation a certificate of inspection, which certificate shall be kept by the butcher or person purchasing the animals for slaughtering. And any butcher or slaughterer killing or slaughtering any animal or animals without first demanding and procuring from the vendor said certificate, shall be deemed guilty of a misdemeanor. Such certificate shall at all times be open to the inspection of any person desiring to see the same and compare it with the hides.

Inspection prior to sale. SEC. 7. Any ranchman, trader, or any other person, not regularly engaged in carrying on the business of slaughtering neat or horned cattle at some known and established slaughtering place within four miles of some city, town, or village, within the limits of this Territory, who shall slaughter any neat or horned cattle for sale on their ranches or elsewhere, shall before offering the meat for sale in any city, town, village, within the limits of this Territory, take such meat, together with the hide, to a regularly appointed inspector and shall have the hide inspected and branded, immediately paying therefor twenty-five cents for each hide so inspected and branded.

License tax. SEC. 8. Any person, persons, firm or corporation who may slaughter animals for sale in any town, village, or city in the Territory of Arizona, he or they shall pay in advance a quarterly license tax of ten dollars, and shall keep the license-tax receipt posted in a conspicuous place in the place where the slaughtered meat is exposed for sale. The sheriffs of the several counties of the Territory shall be ex officio license-tax collectors, as now provided by law, and shall receive as full compensation for such services as collectors, five per cent of the license tax so collected.

Slaughterer to give bond. SEC. 9. Before any person, persons, firm or corporation shall begin, enter upon, or carry on business of slaughtering animals for sale, or for the sale of meat, such person, persons, firm or corporation shall first give bond with two or more good and sufficient sureties to the Territory of Arizona, in the penal sum of one thousand dollars, to be approved by the board of supervisors of the county in which such business is proposed to be carried on, conditioned that such person, persons, firm or corporation shall not slaughter or export for sale any neat animal, or the meat thereof, without first being the legal and equitable owner thereof, as well in law as in fact and that in case such person, persons, firm or corporation shall slaughter or sell, or expose for sale, any neat animal, or the meat thereof, that such person, persons, firm or corporation is not the owner thereof, as aforesaid, shall pay therefor double the value of any such animal, the same to be recovered by action on said bond in the name of the true owner of such animal. The amount so recovered shall be paid as follows: One-half to the owner of such animal; one-fourth to the inspector or person discovering the wrongful possession or slaughtering of such animal, and the remaining one-fourth to the live stock sanitary commission of Arizona.

Penalty. SEC. 10. Any person violating any of the provisions of this act shall be adjudged guilty of a misdemeanor, and on conviction thereof shall be fined in any sum not less than fifty dollars nor more than three hundred dollars, or be imprisoned in the county jail for a term not less than ten days or more than six months, or by both such fine and imprisonment, in the discretion of the court; but nothing in this act shall be construed to repeal any existing law imposing penalties for the unlawful taking, driving, killing, branding, defacing of brands, or other unlawful handling of any of the kinds of animals mentioned in this act.

Duty of prosecuting attorney. SEC. 11. It shall be the duty of the prosecuting attorney of the proper county to prosecute, on behalf of the Territory, all criminal cases arising under this act.

SEC. 12. All acts and parts of acts in conflict with the provisions of this act are hereby repealed.

SEC. 13. This act to take effect and be in force thirty days after its passage and approval.

Approved this 21st day of March, 1895.

AN ACT to amend Title LIX, chapter 3, stock and sanitary law, approved March 10, 1887, Revised Statutes of Arizona.

Be it enacted by the Legislative Assembly of the Territory of Arizona:

Appointment of commissioners; bond; term of office. SECTION 1. Three commissioners, identified with the live-stock interest of the Territory of Arizona, shall be appointed by the governor, who shall constitute the live stock sanitary commission of the Territory of Arizona. Before entering upon the duties of his office each commissioner shall take and subscribe the oath of office, according to law, and file the same with the secretary of the Territory; and each commissioner, before entering upon the performance of his duties, shall execute a bond, to be approved by the governor, in the sum of two thousand dollars, conditioned that he will faithfully perform the duties of his office, and file the same with the secretary of the Territory. The term of office of said commissioners shall be for the period of two years from the first day of April, 1895, next succeeding their appointment, and the governor shall have the power to fill any vacancy in said commission. Said commissioners shall elect one of their number chairman, and the Territorial veterinary surgeon, hereinafter provided for, shall be ex officio secretary of said commission. The commission shall keep a full and complete record of their proceedings, and make such report to the governor as may from time to time be required. The members of the commission appointed by the governor, as hereinbefore provided, shall receive three dollars per day for the time by them necessarily employed in discharging the duties required by this act, and each member of the commission hereinbefore provided for shall receive eight cents for each and every mile actually traveled, which per diem and expenses shall be paid on the warrant of the auditor, to be issued on the filing in his office of an itemized account thereof, properly certified to by such member, duly countersigned by the secretary with the seal of the commission, and approved by the chairman.

Appointment of veterinary surgeon; salary; fees. SEC. 2. The governor shall nominate, and by and with the advice and consent of the legislative council, appoint a skilled veterinary surgeon for the Territory, who at the date of such appointment shall be a graduate in good standing of a recognized college of veterinary surgeons in the United States, and who shall hold his office for the term of two years unless sooner removed; the salary of said veterinary surgeon shall on no account exceed the sum of twelve hundred dollars per annum and eight cents per mile for each actually and necessarily traveled in the discharge of his duties. Before entering upon the duties of his office the Territorial veterinarian shall take and subscribe an oath to faithfully perform the duties of his said office, and shall execute a bond to the Territory of Arizona in the sum of five thousand dollars, with good and sufficient sureties, conditioned for the faithful performance of the duties of his office, which bond and sureties thereto shall be approved by the governor; and said bond, together with his oath of office, shall be deposited in the office of the secretary of the Territory.

Duty of citizens; penalty. SEC. 3. It shall be the duty of any owner or person in charge of any domestic animal or animals who discovers, suspects, or has reason to believe that any of his domestic animals, or domestic animals in his charge, are affected with any contagious or infectious disease, to immediately notify such fact, belief, or suspicion to the commission or to any member of it, or to the Territorial veterinarian; and it shall be the duty of any person who discovers the existence of any contagious or infectious disease among the domestic animals of another to report the same to the live stock sanitary commission or Territorial veterinarian; and any attempt to conceal the existence of such disease, or to willfully or maliciously obstruct or resist the said sanitary commission or Territorial veterinary surgeon in the discharge of their duties as herein set forth, shall be deemed a misdemeanor; and any person or

persons who shall be convicted of any of the above acts or omissions shall be fined not less than twenty-five dollars nor more than two hundred and fifty dollars for each and every such offense; and upon conviction a second time, shall, in addition to the above-named fine, be imprisoned in the county jail for a term not less than thirty days nor more than six months.

Duty of commission. SEC. 4. It shall be the duty of the commission provided for in the first section of this act to protect the health of the domestic animals of the Territory from all contagious or infectious diseases of a malignant character; and for this purpose it is hereby authorized and empowered to establish, maintain, and enforce such quarantine, sanitary, and other regulations as it may deem necessary. It shall be the duty of any member of said commission, upon receipt by him of reliable information of the existence among the domestic animals of the Territory of any malignant disease, to immediately notify the Territorial veterinarian, who shall go at once to the place where any such disease is alleged to exist and make a careful examination of the animals believed to be affected with any such disease, and ascertain, if possible, what, if any, disease exists among the live stock reported to be affected and whether the same is contagious or infectious or not; and if said disease is found to be of a malignant, contagious, or infectious character he shall direct the temporary quarantine and sanitary regulations necessary to prevent the spread of any such disease, and report forthwith his findings and actions to the chairman of the commission.

Quarantine; penalty. SEC. 5. Upon the receipt by the chairman of the commission of the report of the Territorial veterinarian provided for in section 3 of this act, he shall immediately, if the exigencies of the case require it, convene the commission at the most convenient place, and if upon consideration of the report of the veterinarian the commission shall be satisfied that any contagious or infectious disease exists which seriously threatens the health of domestic animals, they shall, after ascertaining and determining the extent of premises or grounds infected, authorize the veterinarian to establish the quarantine, sanitary, and police regulations necessary to circumscribe and exterminate such disease; and no domestic animal liable to become infected with the disease or capable of communicating the same shall be permitted to enter or leave the district, premises, or grounds so quarantined, except by the authority of the veterinarian. The said commission shall prescribe such rules and regulations as will enable the veterinarian to perfectly isolate the diseased and exposed animals from all other domestic animals which are susceptible of becoming infected with the disease; they shall also, from time to time, prescribe and enforce such directions, rules, and regulations as to separating, mode of handling, treating, feeding, and caring for such diseased and exposed animals as it shall deem necessary to prevent the two classes of animals from coming in contact with each other, and the said commission, or any of the members thereof, or said veterinarian, are hereby authorized and empowered to enter upon any grounds or premises to carry out the provisions of this act. Any person failing to comply with the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction shall be fined not less than twenty-five dollars nor more than two hundred and fifty dollars for each offense, and shall be liable for any damage and loss that may be sustained by any person or persons by reason of the failure of such owner or agent to comply with the provisions of this section.

Proclamation of quarantine. SEC. 6. When the commission shall have determined the quarantine and other regulations necessary to prevent the spread among domestic animals of any malignant, contagious, or infectious disease found to exist among the live stock of the Territory, and given its orders as hereinbefore provided, prescribing quarantine and other regulations, it shall notify the governor thereof, who shall issue his proclamation, proclaiming the boundary of such quarantine, and the orders, rules, and regulations prescribed by the commission, which proclamation may be published by written or printed handbills, posted within the boundaries or on the lines of the district, premises, places, or grounds so quarantined, or by being published in the stock papers of the Territory: *Provided*, That if the commission decides that it is not necessary by reason of the limited extent of the district in which such disease exists that a proclamation should be issued, then none shall be issued, but the commission shall give notice as may to it seem best to make the quarantine established effective.

Slaughter of diseased animals. SEC. 7. In any case of epidemic disease where premises have been previously quarantined by the Territorial veterinarian, as before provided, he is further authorized and empowered, when in his judgment necessary, by and with the consent of the live-

stock sanitary commission, to order the slaughter of any or of all diseased animals upon said premises, and of all animals that have been exposed to contagion or infection, under the following restrictions: The order for slaughter shall be a written one, and shall be made in duplicate, and there shall be a distinct order and duplicate for each owner of the animals condemned, the original of each order to be filed in the office of the live-stock sanitary commission, and the duplicate given to said owner. And further, before slaughtering any animal or animals that have been exposed only, and do not show disease, the veterinarian shall call in consultation with him two respectable practicing veterinarians or physicians, residents of the Territory, or, if this is impracticable, then two reputable and well-known stock owners, residents of the Territory, and shall have the written endorsement upon his order of at least one of said consulting physicians or stock owners, stating that said action is necessary, and the consent in writing of the owner or person in charge, before such animal or animals shall be slaughtered. It shall be the duty of the Territorial veterinarian to superintend the slaughtering of such animals as may be condemned, and also the destruction of the carcass, causing the same to be done as cheaply as practicable, which latter shall be by burning to ashes, and shall include every part of the animal and hide, and also excrement and stable bedding or corral litter as far as possible.

Disposal of diseased animals; penalty. SEC. 8. Any person, persons, firm, or corporation who shall have in his possession any domestic animal affected with any contagious or infectious disease, knowing such animal to be affected, or after having received notice that such animal is so affected, who shall sell, ship, drive, trade, or give away such diseased animal or animals which have been exposed to such infection or contagion, or who shall move or drive any domestic animal in violation of any direction, rule, regulation, or order establishing and regulating quarantine, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than twenty-five dollars nor more than two hundred and fifty dollars for each of such diseased or exposed domestic animals which he shall sell, drive, ship, trade, or give away in violation of the provisions of this act: *Provided*, That any owner of any domestic animal which has been affected with or exposed to any contagious or infectious disease may dispose of the same after having obtained from the Territorial veterinarian a bill of health of such animal. It shall be unlawful to kill for butcher purposes any diseased animal, to sell, give away, or use any part of it, or its milk, or to remove any part of the skin. A failure to observe these provisions shall be deemed a misdemeanor, and, on conviction, shall be punished by a fine not less than twenty-five dollars nor exceeding two hundred and fifty dollars.

Duty of commission. SEC. 9. Whenever the live-stock sanitary commission shall have good reason to believe that any contagious or infectious disease exists in any other States, Territories, or countries, or that there are conditions which render domestic animals from such districts liable to convey such disease, they shall report the same to the governor.

Prohibit importation of diseased animals. Thereupon the governor shall, by proclamation, prohibit the importation of any live stock of the kind diseased into the Territory, unless accompanied with a certificate of health, given by a duly authorized State or Territorial veterinary surgeon; and all such animals arriving in the Territory shall be examined upon arrival by the Territorial veterinary surgeon, and if deemed necessary, placed in close quarantine until all danger of infection is passed, when they shall be released by order of the veterinary surgeon. All expenses connected with such examination shall be paid by the owner or owners of such stock.

Animals in transit, regulations. SEC. 10. It shall be unlawful for any person, persons, firm, or corporation to drive or transport, or cause to be driven or transported, into the Territory of Arizona any live stock from those States, Territories, or countries against which the governor has proclaimed a quarantine as hereinbefore provided for in section nine of this act: *Provided*, That cattle in transit through the Territory on the railroads, when not unloaded, are not liable to any penalties attached to this act; otherwise the regulations contained herein shall apply as well to those animals in transit through the Territory as to those resident therein; and the Territorial veterinary surgeon shall have full authority to examine, whether in yards or pastures or stables or upon the public domain, all animals passing through the Territory or any part of it, and, on detection or suspicion of disease, to take possession of and treat and dispose of said animals in the same manner as is prescribed for animals resident in the Territory.

Penalty. SEC. 11. Any person, persons, firm, or corporation, who shall knowingly bring into this Territory any domestic animal or animals affected with any contagious or infectious disease, or any animal or animals which have been exposed to any contagious or infectious disease, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined in any sum not less than twenty-five dollars or more than two hundred and fifty dollars, and shall further become liable for any and all damage and loss that may be sustained by any person or persons by reason of the importation of such prohibited animals.

Penalty. SEC. 12. Except as otherwise provided in this act, any person, persons, firm, or corporation who shall violate, disregard, or evade, or attempt to violate, disregard, or evade, any of the provisions of this act, or who shall violate, disregard, or evade, or attempt to violate, disregard, or evade, any of the rules, regulations, orders, or directions of the live-stock sanitary commission establishing and governing quarantine, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined in any sum not less than twenty-five dollars nor more than two hundred and fifty dollars.

Power of commission. SEC. 13. The commission provided for in this act shall have the power to employ such persons and purchase such supplies and material as may be necessary to carry into full effect all orders by it given, as hereinbefore provided: *Provided*, That no laborer shall be employed, nor material or supplies purchased by the commission, except such additional labor, material, and supplies as may be necessary to carry into effect the quarantine and other regulations prescribed by the commission.

Power of commission. SEC. 14. The commission shall have the power to call upon any sheriff, under sheriff, deputy sheriff, constable, cattle inspector, or detective to execute their orders, and such officers shall obey the orders of said commission; and the officers performing such duties shall receive compensation therefor as is prescribed by law for like services; and any officer may arrest on view, and take before any magistrate of the county, any person found violating the provisions of this act; and such officer shall immediately notify the county attorney of such arrest, and he shall prosecute the person so offending according to law.

General supervision of commission. SEC. 15. The live-stock commission is hereby authorized, and it is made its duty, to exercise a general supervision over, and so far as may be protect, the stock interests of the Territory from theft; and in furtherance of this object the commission shall devise and recommend from time to time such legislation as in their judgment will foster this important industry, and shall appoint such live-stock inspectors and detectives as they deem necessary for the better protection of the live-stock interests of the Territory. Said stock inspectors and detectives shall be under the exclusive direction and control of the commission, and shall report to its secretary all their official acts as prescribed in the rules and regulations of the commission. The commission shall cause to be kept in a safe place a permanent record of their own acts and of all of the official reports of said inspectors and detectives: *Provided*, That the commission may pay for the clerical work in keeping the records of the inspection service in the office of the commission a sum not exceeding fifty dollars per month.

System of inspection. SEC. 16. The commission shall devise a system of inspection of all stock exported from the Territory and of all stock slaughtered in the Territory, and shall prescribe rules and regulations for the seizing and selling of stray stock, or of stock in the brands of unknown owners, for discovering said unknown owners, and for the remitting to them the proceeds of such sales. They shall furnish suitable blanks in duplicate, upon which all inspectors shall keep a record of their inspections, and upon which they shall report to the commission all inspections made. The inspection reports, whether in the hands of the inspector or the office of the commission, shall at all times be open to any person or persons desiring to examine them, and the secretary of the commission shall give to any person inquiring any desired information obtainable from the inspection records.

Duty of inspector. SEC. 17. The stock inspectors and detectives are hereby empowered, and it shall be their duty, to arrest all persons who shall violate the stock laws of this Territory which shall come under their observation, and shall, upon information that any person or persons have committed any crime or misdemeanor against the laws of this Territory in feloniously branding or stealing any stock, of any other crime or misdemeanor under any of

the laws of this Territory for the protection of the rights and interests of stock owners, make the necessary affidavit for the arrest and examination of such person or persons, and shall, upon warrant issued therefor by any officer authorized to issue the same, immediately arrest such person or persons and bring them before the officer issuing said warrant or any other officer authorized to act in case of his absence or inability to act, to be dealt with according to law, and shall make due return of said warrant and notify the live-stock commission of his acts and doings in that behalf; and it shall be the duty of said live-stock commission, in every proper way, to assist in the prosecution and conviction of any and all persons guilty of any of the crimes and misdemeanors against the laws of this Territory in feloniously branding or stealing any stock, or any other crime or misdemeanor under any of the laws of this Territory for the protection of the rights and interests of stock owners.

Accounts. SEC. 18. All accounts shall be presented to the commission, accompanied by triplicate vouchers, one of which shall be filed in the office of the commission. They shall be examined, considered, and approved for payment if ascertained to be correct, and thereupon certified by the chairman and countersigned by the secretary to the Territorial auditor, accompanied with a duplicate voucher, setting forth each item covered in said certificate. The Territorial auditor shall then draw his warrant on the Territorial treasurer for the respective amounts set forth in each certified account, and the treasurer shall pay the same as other Territorial warrants are paid.

Funds from sale of stray stock. SEC. 19. Whenever any funds received by this commission from the sale of stray stock shall have remained in its possession for twelve months without any lawful claimant therefor having been found, it shall be the duty of the chairman of said commission to pay the sum to the Territorial treasurer, to be by him placed to the credit of the general fund of the Territory. And all moneys received by the commission for fines and penalties under the provisions of this act shall be in like manner turned into the general fund of the Territory.

Authority of commission. SEC. 20. For the purposes of this act each member of the live-stock sanitary commission is hereby authorized and empowered to administer oaths and affirmations.

Justices of the peace. SEC. 21. Justices of the peace within their respective counties shall have the criminal jurisdiction in all cases under the provisions of this act.

Duty of prosecuting attorney. SEC. 22. It shall be the duty of the prosecuting attorneys of the proper county to prosecute, on behalf of the Territory, all criminal cases arising under this act.

SEC. 23. All acts and parts of acts in conflict with the provisions of this act are hereby repealed.

SEC. 24. This act shall take effect and be in force from and after its passage and approval.

Approved this 21st day of March, 1895.

AN ACT to amend chapter 6, Title LIX, of the Revised Statutes of Arizona, entitled Sheep Quarantine.

Be it enacted by the Legislative Assembly of the Territory of Arizona:

Duties of inspector; bond. SECTION 1. Within thirty days after the passage of this act the governor of this Territory shall appoint an inspector of sheep in and for each of the counties of this Territory. Such inspector of sheep shall hold such office until the first day of January, 1897, and until his successor is duly appointed and qualified; and on the first day of January, 1897, and every two years thereafter, the governor shall appoint such inspector of sheep, who shall hold such office until his successor is duly appointed and qualified. Such inspector of sheep shall be a resident of the county for which he is appointed, and shall be a practical sheep man. Before entering upon the discharge of his duties he shall execute a bond, payable to the Territory of Arizona, in the sum of one thousand dollars, with at least two good and sufficient sureties, to be approved by the board of supervisors, conditioned for the faithful discharge of the duties of his office. Such inspector may appoint one or more deputies within his county, for whose official acts he and his official bond shall be responsible. It shall be the duty of such inspector at any time, upon the affidavit of

any citizen of his county having in charge or owning sheep, that sheep in such county owned by or in charge of any other person, giving location thereof, are infected with scab, scabies, or other contagious or infectious disease, or upon personal knowledge of such facts, to examine such sheep without delay, and if he shall find such sheep to be infected with any such diseases he shall notify the owner or party in charge thereof, in writing, to doctor, dip, or cure them forthwith by the use of some standard curative medicine. If such owner or party in charge fail or refuse to so doctor, dip, or cure said sheep for ten days after notice, said inspector shall take said sheep into his possession at once and cure them or cause them to be cured. He may call to his assistance such aid as may be necessary for that purpose, and the owner or owners of such diseased sheep shall be liable to said inspector for all necessary expenses, costs, and charges incurred in curing such sheep, including a compensation of five dollars per day to such inspector for every day or part of a day in which he shall be necessarily employed and fifteen cents per mile for each and every mile traveled to and from such place: *Provided*, That if such complaint shall be false, the party complaining shall be liable to said inspector for such mileage and per diem, such sum to be recovered in any court of competent jurisdiction: *Provided further*, That any party willfully and maliciously making false affidavits under this act shall be guilty of perjury and punished accordingly.

Certificate of condition. SEC. 2. Any person, company, or corporation bringing or causing to be brought to any county of this Territory any sheep or band of sheep must first procure from some inspector appointed under this act a certificate that such sheep or band of sheep are sound and free from scab, scabies, and all other contagious and infectious diseases before entering said county.

Precautions against spreading of disease; penalty. SEC. 3. Whenever, on examination of any herd or band of sheep within any county of this Territory, said inspector shall find such sheep or any part of them infected by any of said diseases he shall forthwith take all and every necessary measure and precaution to prevent such disease from spreading, and the owner or owners of such diseased sheep shall immediately proceed to treat such sheep for the cure of such disease, and any person who shall refuse or neglect to immediately observe the directions of such inspector, as provided in this section, or either of the two preceding sections of this act, shall be guilty of a misdemeanor, punished, on conviction, by a fine of not less than one hundred dollars, and not more than two hundred and fifty dollars.

Duty of sheep owners; penalty. SEC. 4. It shall be the duty of every owner of sheep or other party in this Territory, wishing to change or alter the mark or to re-mark any sheep, to give notice to the said inspector, in writing, giving the approximate number of sheep to be so marked, their present marks and the mark or marks to which they are to be changed, and the point at which such sheep are located, and the inspector shall, on receipt of such notice, agree with such owner, or party so notifying him, or in charge of such sheep, upon a date and place at which said marking shall be done, and shall on the day so fixed be present at the place named, in person or in deputy, and shall inspect every sheep so re-marked, and shall keep a complete record of the mark changed and the number re-marked and the marks into which they are changed, and shall file each month with the county recorder a statement showing these facts and the name of the owner of the sheep and the parties doing the marking, and shall deliver a certificate of such facts to the owners or party in charge of such sheep, and no person shall change or re-mark a sheep without the presence of an inspector or deputy, after written notice, as above required. Every person so re-marking, or under whose directions, or at whose instance such marking shall be done, without the notice above provided for and the presence of the inspector or deputy, as above provided, shall be guilty of a misdemeanor and subject to a fine of not less than twenty-five cents nor more than two dollars for each sheep so re-marked, and such facts when proved shall be *prima facie* evidence of fraud in any civil action wherein the identity of the sheep or original mark shall be the question at issue, and possession of sheep so re-marked, without the required certificate of inspection, shall be *prima facie* proof of such marking by the party in charge thereof.

Legal fees. SEC. 5. All legal fees, charges, and expenses of such inspector under this act shall be a first lien upon any such diseased or infected sheep, in whosesoever possession they may be found, for sixty days after treatment or inspection, as herein provided; and in case the owner or owners or party in charge representing such owner or owners in their absence shall fail or refuse to

pay any legal charges, fees, mileage, or expenses upon the completion of such inspection or treatment, as provided in this act, such inspector may recover such fees, charges, and expenses from the owner or owners of such sheep by an action in any court of competent jurisdiction, or he may seize and hold such sheep or any part thereof for such payment; and if such fees, charges, or expenses are not paid within ten days after such inspection or treatment was completed, then such inspector may sell at public or private sale sufficient of such sheep to pay all legal fees, charges, and expenses, including expense of such seizure and holding, and five dollars per day for his time during such seizure and holding: *Provided*, That no person, company, or corporation shall be required to treat or dip any band of ewes, or any part of them, in which there are ewes with lamb at any time from the first day of March to the first day of June in any year.

Fees of inspector of sheep. SEC. 6. The fees of inspector of sheep shall be as follows: For inspecting and granting certificate of inspection, five dollars each and fifteen cents per mile for every mile necessarily traveled in making such inspection and enforcing the requirements of this act or any duty or requirement thereunder, and five dollars per day for each day or part of a day more than one which he shall be so engaged in the inspection and handling or treatment of such sheep, including the time he shall hold such sheep after treatment before payment of his legal fees, expenses, and charges.

Liability. SEC. 7. Any person, company, or corporation violating any of the provisions of this act shall be liable in a civil action for all damages sustained by any person, company, or corporation in consequence of such violation.

Duty of inspector. SEC. 8. It shall be the duty of such inspector and his deputies to institute prosecution for all violation of this act, but nothing herein contained shall prevent other persons from so doing.

Penalty. SEC. 9. Upon the arrival of any band or herd of sheep in this Territory, the owner or person in charge shall immediately report such sheep to the inspector in the county where such sheep may be for inspection. Upon failure to do so, such owner or person in charge of such sheep shall, upon conviction, be punished by a fine of not less than one hundred dollars and not more than two hundred and fifty dollars.

SEC. 10. All acts and parts of acts in conflict with this act are hereby repealed.

SEC. 11. This act shall take effect and be in force from and after its passage.

Approved this 21st day of March, 1895.

AN ACT to codify and revise the laws with reference to live stock.

Be it enacted by the Legislative Assembly of the Territory of Arizona:

Live-stock sanitary board; record, pay, mileage. SECTION 1. Three commissioners identified with the live-stock interests of the Territory of Arizona shall be appointed by the governor, with the advice and consent of the legislative council, who shall constitute the live-stock sanitary board of the Territory of Arizona. Before entering upon the duties of his office each commissioner shall take and subscribe the oath of office according to law, and file the same with the secretary of the Territory; and each commissioner before entering upon the performance of his duties shall execute a bond, to be approved by the governor, in the sum of two thousand dollars, conditioned that he will faithfully perform the duties of his office, and file the same with the secretary of the Territory. The term of office of the first commissioner named by the governor shall be for three years from the first day of April, 1897; the second one named shall be for two years, and the third one named shall be for one year from said first day of April, 1897, and the successors of each shall be appointed for the term of three years thereafter. The governor shall have the power to fill vacancies in said board. Said board shall elect one of their number chairman. The board shall keep a full and complete record of their proceedings, and make such report to the governor as may from time to time be required, and a biennial report to the legislative assembly. The members of the board appointed by the governor as hereinbefore provided shall receive five dollars per day for the time by them necessarily employed in discharging the duties required by this act, provided, however, that in no one year shall the board be in session more than sixty days, except upon call of the governor, and each member of the board shall receive ten cents for each and every mile actually traveled, which per diem and mileage shall be paid on the warrant of the auditor,

to be issued on the filing in the auditor's office of an itemized account thereof, properly certified thereto by such member, duly countersigned by the secretary, with the seal of the board and approval of its chairman.

Veterinary surgeon. SEC. 2. The governor shall nominate, and by and with the advice and consent of the legislative council appoint, a skilled veterinary surgeon for the Territory of Arizona, who at the date of such appointment shall be a graduate in good standing of a recognized college of veterinary surgeons, and who shall hold his office for the term of two years, unless sooner removed by the board; the salary of said veterinary surgeon shall be the sum of twelve hundred dollars per annum and ten cents per mile for each mile actually and necessarily traveled in the discharge of his duties. Before entering upon the discharge of his duties the Territorial veterinarian shall take and subscribe an oath to faithfully perform the duties of his said office, and shall execute a bond to the Territory of Arizona in the sum of five thousand dollars, with good and sufficient sureties, conditioned for the faithful performance of the duties of his office, which bond and sureties thereto shall be approved by the governor, and said bond, together with the oath of office, shall be deposited in the office of the secretary of the Territory.

Diseased animals. SEC. 3. It shall be the duty of any owner or person in charge of any domestic animal or animals who discovers, suspects, or has reason to believe that any of his domestic animals, or domestic animals in his charge, are affected with any infectious or contagious disease to immediately notify such fact, belief, or suspicion to the board or any member of it or to the Territorial veterinarian; and it shall be the duty of any person who discovers the existence of any contagious or infectious disease among the domestic animals of another to report the same to the said board of Territorial veterinarians, and any attempt to conceal the existence of such disease, or to wilfully or maliciously obstruct or resist the said board or the Territorial veterinarian in the discharge of their duties as herein set forth, shall be deemed a misdemeanor.

Duty of commission. SEC. 4. It shall be the duty of the board provided for in the first section of this act to protect the health of the domestic animals of the Territory from the contagious and infectious disease of a malignant character, and for this purpose it is hereby authorized and empowered to establish, maintain, and enforce such quarantine, sanitary, and other regulations, including methods of disinfecting railroad cars, as it may deem necessary. It shall be the duty of any member of said board, upon receipt by him of reliable information of the existence among the domestic animals of the Territory of any malignant disease, to immediately notify the Territorial veterinarian, who shall go at once to the place where any such disease is alleged to exist and make a careful examination of the animals believed to be affected with any such disease, and ascertain, if possible, what, if any, disease exists among the live stock reported to be affected, and whether the same is contagious or infectious or not, and if said disease is found to be of a malignant, contagious, or infectious character, he shall direct a temporary quarantine and sanitary regulations necessary to prevent the spread of any such disease, and report forthwith his findings and actions to the chairman of the board.

Quarantine. SEC. 5. Upon the receipt by the chairman of the board of the report of the Territorial veterinarian provided for in section 4 of this act, he shall immediately, if the exigencies of the case require it, convene the board at the most convenient place, and if upon consideration of the report of the veterinarian the board shall be satisfied that any contagious or infectious disease exist which seriously affects the health of domestic animals, they shall, after ascertaining and determining the extent of premises or grounds infected, authorize the veterinarian to establish the quarantine, sanitary, and police regulations necessary to circumscribe and exterminate such disease; and no domestic animal liable to become infected with the disease or capable of communicating the same shall be permitted to leave the district, premises, or grounds so quarantined except by the authority of the veterinarian. The said board shall prescribe such rules and regulations as will enable the veterinarian to perfectly isolate the diseased and exposed animals from all other domestic animals which are susceptible of becoming infected with disease; they shall also, from time to time, prescribe and enforce such directions, rules, and regulations as to separating, mode of handling, treating, feeding, and caring for such infected or diseased and exposed animals as it shall deem necessary to prevent the two classes of animals from coming in contact with each other; and the said board or any of the members thereof, or said veterinarian, are hereby

authorized and empowered to enter upon any grounds or premises to carry out the provisions of this act.

Proclamation of quarantine. SEC. 6. When the said board shall have determined the quarantine and other regulations necessary to prevent the spread among domestic animals of any malignant, contagious, or infectious disease found to exist among the live stock of the Territory, and given the orders as hereinbefore provided prescribing quarantine and other regulations, it shall notify the governor thereof, who shall issue his proclamation proclaiming the boundary of such quarantine, and the orders, rules, and regulations prescribed by the board, which proclamation may be published by written or printed handbills posted within the boundaries or on the lines of the district, premises, places, or grounds so quarantined, or by being published in the stock papers of the Territory: *Provided*, That if the board decides that it is not necessary, by reason of the limited extent of the district in which such disease exists, that a proclamation should be issued, then none shall be issued, but the board shall give notice as may to it seem best to make the quarantine established effective.

Slaughter of diseased animals. SEC. 7. In any case of epidemic disease where premises have been previously quarantined by the Territorial veterinarian, as before provided, he is further authorized and empowered, when in his judgment necessary, by and with the consent of the board, to order the slaughter of any or of all diseased animals upon said premises and of all animals that have been exposed to contagion or infection, under the following restrictions: The order for slaughter shall be in writing, and shall be made in duplicate, and there shall be a distinct order and a duplicate for each owner of the animal or animals condemned, the original of each order to be filed in the office of the said board and the duplicate given to the said owner. And further, before slaughtering any animal or animals that have been exposed only and do not show disease the veterinarian shall call in consultation with him two reputable practicing veterinarians or physicians, residents of the Territory, or if this is impracticable, then two reputable and well-known stock owners, residents of the Territory, and shall have the written indorsement upon his orders of at least one of said consulting physicians or stock owners, stating that the said action is necessary, and the consent in writing of the owner or person in charge before such animal or animals shall be slaughtered. It shall be the duty of the Territorial veterinarian to superintend the slaughtering of such animals as may be condemned, and also the destruction of the carcass, causing the same to be destroyed as cheaply as practicable, which destruction shall be by burning to ashes, and shall include every part of the animal and hide and also excrement and stable bedding or corral litter as far as possible.

Prohibition of possession, movement, sale, and slaughter. SEC. 8. Any person, persons, firm, or corporation who shall have in his possession any domestic animal affected with any contagious or infectious disease, knowing such animal to be so affected, or after having received notice that such animal is so affected, who shall sell, drive, ship, trade, or give away such diseased animal or animals which have been exposed to such infection or contagion, sheep infected with scab upon the range excepted, or who shall move or drive any domestic animal in violation of any direction, rule, regulation, or order establishing and regulating quarantines, shall be deemed guilty of a misdemeanor: *Provided*, That any owner of any domestic animal which has been affected with or exposed to any contagious or infectious disease may dispose of the same after having obtained from the Territorial veterinarian a bill of health of such animal. It shall be unlawful to kill for butcher purposes any diseased animal, to sell, give away, or use any part of it or its milk, or to remove any part of the skin.

Reports and proclamations. SEC. 9. Whenever the said board shall have good reason to believe that any contagious or infectious disease exists in any other State, Territory, or countries, or that there are conditions that render domestic animals from such districts liable to convey such disease, they shall report the same to the governor. Thereupon the governor shall, by proclamation, prohibit the importation of any live stock of the kind diseased into the Territory, unless accompanied with a certificate of health given by a duly authorized State or Territorial veterinarian, and all such animals arriving in this Territory shall be examined upon arrival by the Territorial veterinary surgeon, and if deemed necessary placed in close quarantine until all danger of infection is passed, when they shall be released by order of the Territorial veterinarian. All expense connected with such examination shall be paid by the owner or owners of such stock.

Prohibiting importation. SEC. 10. It shall be unlawful for any person, persons, firm, or corporation to drive or transport, or cause to be driven or transported, into the Territory of Arizona any live stock from those States, Territories, or countries against which the governor has proclaimed a quarantine, as hereby provided for in section 9 of this act: *Provided*, That cattle in transit through the Territory on a railroad, when not unloaded, are not liable to any penalties attached to this act. Otherwise the regulations contained herein shall apply as well to those animals in transit through the Territory as to those resident therein, and the said board, a member thereof, or the Territorial veterinary surgeon shall have full authority to examine, whether in yards, or pasture, or stables, or upon the public domain, all animals passing through the Territory or any part of it, and on detection or suspicion of disease to take possession of and treat and dispose of said animals in the same manner as is prescribed for animals resident in the Territory.

Misdemeanor. SEC. 11. Any person, persons, firm, corporation, owner, or agent who shall knowingly bring into this Territory any domestic animal or animals affected with any contagious or infectious disease, or any animal or animals which have been exposed to any contagious or infectious disease, shall be deemed guilty of a misdemeanor.

Penalty. SEC. 12. Except as otherwise provided in this act, any person, persons, firm, corporation, owner, or agent who shall violate, disregard, or evade, or attempt to violate, disregard, or evade any of the provisions of this act, or who shall violate, disregard, or evade, or attempt to violate, disregard, or evade, any of the rules, regulations, orders, or directions of the said board establishing and governing quarantine shall be deemed guilty of a misdemeanor; and any person, persons, firm, corporation, owner, or agent who violates any of the provisions of this or of sections 3, 5, 8, or 11 of this act shall be guilty of a misdemeanor, and upon conviction thereof in any court of competent jurisdiction shall be fined not less than fifty nor more than three hundred dollars, and shall be liable for any damages that may be sustained by reason of their failure to comply with the provisions of the said sections.

Supplies and labor. SEC. 13. The said board shall have the power to employ such persons and purchase such supplies and material as may be necessary to carry into full effect all orders by it given, as hereinbefore provided: *Provided*, That no laborer shall be employed or material or supplies purchased by the said board except such additional labor, material, and supplies as may be necessary to carry into effect the quarantine and other regulations prescribed by the said board.

Duty of officers under call of commissioners. SEC. 14. The said commissioners shall have the power to call upon any sheriff, undersheriff, deputy sheriff, constable, cattle inspector, or detective to execute their orders, and such officers shall obey the orders of said board; and the officers performing such duties shall receive compensation therefor as is prescribed by law for like services; and any officer may arrest on view and take before any magistrate of the county any person found violating any of the provisions of this act, and such officer shall immediately notify the district attorney of such county of such arrest, and he shall prosecute the person so offending according to law.

Inspectors and their duties. SEC. 15. The said board hereby is authorized, and it is made its duty, to exercise a general supervision over and, so far as may be, protect the stock interests of the Territory from theft; and in furtherance of this object the said board shall devise and recommend from time to time such legislation as in their judgment will foster this important industry, and shall appoint such live-stock inspectors and detectives as they may deem necessary for the better protection of the live-stock interests of the Territory. Said stock inspectors and detectives shall be under the exclusive direction and control of the said board, and shall report to it all their official facts, as prescribed in the rules and regulations of the said board. The said board shall cause to be kept in a safe place a permanent record of their own acts and of all official reports of said inspectors and detectives: *Provided*, That the board may appoint a secretary, and pay for the clerical work and keeping of the records of the inspection service in the office of the board a sum not exceeding fifty dollars per month.

Manner of inspecting. SEC. 16. The said board shall devise a system of inspection for health and for marks and brands of all stock exported from the Territory and of all stock slaughtered in the Territory, and shall prescribe rules and regulations for the seizure and selling of stray stock or

of stock in the brand of unknown owners; for discovering unknown owners and for remitting to them the proceeds of such sale. They shall furnish suitable blanks in triplicate, upon which all inspectors shall keep a record of their inspections, and upon which they shall report to the board all inspections made. The inspection report, whether in the hands of the inspector or in the office of the board, shall at all times be open to any person or persons desiring to examine them, and the secretary of the board shall give to any person inquiring any desired information obtainable from the inspection records.

Duty of inspectors. SEC. 17. The stock inspectors and detectives are hereby empowered, and it shall be their duty, to arrest all persons who violate the stock laws of this Territory which shall come under their observation, and shall, upon information that any person or persons have committed any crime or misdemeanor against the laws of this Territory in feloniously branding any stock, or other crime or misdemeanor under the laws of this Territory for the protection of the rights and interests of stock owners, make the necessary affidavit for the arrest and examination of such person or persons; and shall, upon warrant issued therefor by any officer authorized to issue the same, immediately arrest such person or persons and bring them before the officer issuing such warrant, or any other officer authorized to act in case of his absence or inability to act, to be dealt with according to law, and shall make due return of said warrant, and notify the said board of his acts and doings in that behalf; and it shall be the duty of said board in every proper way to assist in the prosecution and conviction of any and all persons guilty of any of the crimes and misdemeanors against the laws of this Territory in feloniously marking or branding or stealing any stock, or other crime or misdemeanor under any of the laws of this Territory for the protection of the rights and interests of stock owners.

Accounts. SEC. 18. All accounts shall be presented to the board, accompanied with triplicate vouchers, two of which shall be filed in the office of the board. They shall be examined, considered, and approved for payment, if ascertained to be correct, and thereupon certified by the chairman and countersigned by the secretary to the Territorial auditor, setting forth each item covered in said certificate. The Territorial auditor shall then draw his warrant on the Territorial treasurer for the respective amount set forth in each specified account, and the treasurer shall pay the same as other Territorial warrants are paid.

Disposal of funds. SEC. 19. Whenever any funds, received by this board from the sale of stray stock, shall have remained in its possession for twelve months without any lawful claimant therefor having been found, it shall be the duty of the chairman of the board to pay the same to the Territorial treasurer, to be by him placed to the credit of the general fund of the Territory.

Commissioners to administer oaths. SEC. 20. For the purposes of this act each commissioner of the said board is hereby authorized and empowered to administer oaths and affirmations.

Appointment of inspectors. SEC. 21. It is hereby made the duty of the said board to appoint live-stock inspectors and detectives upon a petition signed by not less than five persons, each of whom shall be interested and engaged in the business of owning and breeding live stock in the Territory of Arizona, who shall hold their offices at the will and pleasure of the board.

Duties; records. It shall be the duty of the said inspectors and detectives, under rules and regulations prescribed by the board, to inspect for health and for marks and for brands, at the railway loading stations or at the line of exit from the Territory, all stock about to be or being shipped or driven from, through, or to any point in the Territory of Arizona, to require from the owner or owners, person or persons in charge of such stock a list of the brands and marks and to make sure by inspection that any and all live stock being shipped or driven as aforesaid is not stolen property, and that the person or persons in charge are the owners thereof, or are properly authorized in writing to handle such stock. The inspector or detective shall make a permanent record of such inspection, showing the date and place of making the same, the name of the owner or owners, the person or persons in charge of said stock, the kind and description of stock, together with the number in each brand and mark, and all other and further necessary information, which said record shall be open for inspection by all persons desiring to inspect the same. A duplicate record of all inspections shall be sent to the board at such times and under such rules and regulations as the board may adopt.

Bond. SEC. 22. Any person who shall receive an appointment to the office of inspector or detective under this act, before entering upon the performance of his duties, shall take the oath of office prescribed by law, and shall file a bond in the sum of five hundred dollars with the county recorder of the county wherein he resides, running in the name of the Territory, executed by himself and at least two good and sufficient sureties, which bond shall be approved by the chairman of the board of supervisors of said county, conditioned upon the faithful performance of the duties of his office.

Penalty for false information or bribery.

SEC. 23. Any inspector or detective who shall knowingly give or make a false certificate, or shall, without good cause, refuse to give a certificate of inspection, or shall accept any bribe for failure to perform any of the duties prescribed by this act, or who shall give a certificate of inspection before receiving his fees for such inspection, or wilfully delay in making inspections when notified, shall be liable, with his sureties on his official bond, to the injured parties for all damages arising therefrom.

Compensation. SEC. 24. Every inspector appointed under this act must inspect all live stock subject to inspection immediately, except when such inspector is engaged elsewhere in a like duty, upon being notified by owner or person in charge of such stock of the time and place from which said live stock is to be shipped or driven; and when inspected, said party in charge shall forthwith pay such inspector or detective for such inspection three cents per head for horses and neat cattle; one cent per head for hogs; whereupon the inspector shall certify in writing to the owner or person in charge, on form furnished by said board, that said stock has been inspected according to law for marks and brands.

Driving stock off range. SEC. 25. Any person, not being the owner or having the right of possession of any animal or animals, who shall be found driving any such animal or animals off its or their usual range, without the consent of the owner or owners thereof, shall be deemed guilty of larceny, and shall be arrested by the inspector or detective, or by any constable, officer, or other person specially deputized for that purpose by a judge or justice of the peace, and such person or persons may be taken before any magistrate for examination.

Duty of railroads. SEC. 26. It shall be unlawful for any railroad company to receive any live stock for transportation until the same shall have been inspected as required by this act, and until such railroad company shall have been furnished with a certificate by a duly authorized inspector or detective, showing that the brands and earmarks on such live stock have been duly inspected as required by this act. Any railroad company or any officer, agent, or servant of a railroad company who shall violate the provisions of this act shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than one hundred dollars and not more than five thousand dollars, in the discretion of the court.

Penalty. SEC. 27. Any person violating any of the provisions of sections 21, 22, 23, or 24 of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding three hundred dollars, or by imprisonment in the county jail not exceeding six months, or by both such fine and imprisonment.

Texas fever. SEC. 28. No person shall, between the first day of February and the first day of December of any year, drive or cause to be driven into or through any county or part thereof in this Territory, or turn loose or cause to be turned upon or kept upon any highway, range, common, or enclosed pasture within this Territory, any cattle capable of communicating or liable to impart what is known as Texas, splenic, or Spanish fever. Any person violating any provisions of this section shall, upon conviction thereof, be adjudged guilty of a misdemeanor, and shall for each offense be fined not less than one hundred dollars and not more than two thousand dollars, or be imprisoned in the county jail not less than thirty days and not more than one year, or by both such fine and imprisonment.

Infected cattle not to be transported. SEC. 29. No officer, agent, employee, servant, or other person connected with or employed in the business or operation of any railroad, common carrier, or other transportation company or association, shall ship or cause to permit or be shipped, or transport or cause or permit to be transported by means of the transportation afforded by such common carrier, railway, or other transportation corporation,

company, or association, or deliver to any consignee or other person, between the first day of February and the first day of December of any year, within this Territory, any cattle capable of communicating or liable to impart what is known as Texas, splenic, or Spanish fever. Any person connected with or employed in the business or operation of any railway, common carrier, or other transportation company, corporation, or association violating any of the provisions of this section shall, upon conviction thereof, be adjudged guilty of a misdemeanor, and shall for each offense be fined not less than five hundred dollars nor more than two thousand dollars, or be imprisoned in the county jail not less than thirty days nor more than one year, or by both such fine and imprisonment: *Provided*, That cattle in transit in cars through this Territory on any railroad, and not unloaded, are not liable to the penalties attached to this section.

Peace officers; duties. SEC. 30. It shall be the duty of any sheriff, undersheriff, deputy sheriff, or live-stock inspector or detective within this Territory, upon a complaint made to him by any citizen of the Territory, or otherwise having notice or knowledge that there are within the county where such officer resides cattle believed to be capable of communicating or liable to impart the disease known as Texas, splenic, or Spanish fever, to forthwith take charge of and restrain such cattle under such temporary quarantine regulations as will prevent the communication of such disease, and make immediate report thereof to the said board; and such officer shall keep such cattle in custody as aforesaid until released by order of said board, and no officer who shall take or detain any cattle under the provisions of the statute shall be liable to the owner of such cattle for any damage by reason of such detention or taking or by reason of the performance of any other duty enjoined by this section.

Quarantine. SEC. 31. Whenever said board shall determine that certain cattle within the Territory are capable or liable to impart Texas, splenic, or Spanish fever, they shall issue any order to the sheriff or any constable or live-stock inspector of the county in which such cattle are found, commanding him to take and keep such cattle in his custody, subject to such quarantine regulations as they may prescribe, until the first of December next ensuing, on which date they shall direct such officer to deliver such cattle to their owners or agents: *Provided, however*, That before any cattle so held shall be delivered as aforesaid there shall be paid to said board all the costs and expenses of taking, detaining, and holding said cattle, and if such costs and expenses are not paid within ten days after the first day of December, the said officer shall advertise, in the same manner as is by law provided in cases of sales of personal property, that he will sell such cattle, or such portion thereof as may be necessary, to pay such costs and expenses of the sale, and at the time and place so advertised he shall proceed to sell as many of said cattle as shall be necessary to pay off said costs and expenses, and expense of the sale, and forthwith shall pay over to the owner of said cattle, or his legal representative, any amount so received in excess of the legal fees and expenses of such officer. Any officer performing any of the duties enjoined in this section or in the next shall receive the same compensation therefor as is prescribed by law for similar services, to be paid as other expenses of said board are paid by law.

Penalties and damages. SEC. 32. Any such person as is specified in section 29 of this act, or any officer, agent, employee, servant, or other person as is specified in section 30 of this act, violating any of the provisions of this act, shall be liable to any party injured through such violation for any damage that may thereby arise from the communication of Texas, splenic, or Spanish fever, to be recovered in a civil action, and the party so injured shall have a lien for his damages on the cattle so communicating the disease, such lien to be enforced in like manner as other liens are enforced.

Evidence; when prima facie. SEC. 33. In the trial of any person charged with a violation of any of the provisions of this act, and in the trial of any civil action to recover damages for the communication of Texas, splenic, or Spanish fever, proof that the cattle which such person charged with driving or keeping in violation of law, or which are claimed to have communicated the said disease, were brought to this Territory between the first of February and the first of December of each year in which the offense was committed or such cause of action arose, from territory within area of which the United States Department of Agriculture from time to time has given notice that a contagious and infectious disease known as splenic, or Southern, fever exists among cattle, shall be taken as *prima facie* evidence that such cattle were capable of communicating or liable to impart Texas, splenic, or Spanish, fever within the meaning of this act, and that the owner or person in charge of such cattle has

full knowledge and notice thereof at the time of the commission of the alleged offense: *Provided*, That the provisions of this act shall apply to the State of California during the whole year and shall not apply to any cattle shipped or driven from Sonora, Mexico.

Jointly liable. SEC. 34. Whenever two or more persons shall, in violation of this act, at the same time or at different times during the year, drive or cause to be driven upon any highway, range, common, or pasture within this Territory any cattle capable of communicating or liable to impart said fever, they shall be jointly and severally liable for all damage that may arise from the communication of such disease, at any time thereafter during the same year, to any domestic, native, or acclimated cattle that have been on the same highway, range, common, or pasture so previously traveled over by such mentioned cattle.

Slaughterhouse inspectors. SEC. 35. The said board on petition therefor, signed by at least five persons, each of whom are engaged in the business of owning and breeding live stock in this Territory, shall have power to and shall appoint live-stock inspectors to reside in or near each city, town, or village, or at any point where live stock are slaughtered in this Territory, who shall hold office at the will and pleasure of the said board. No person or persons engaged or employed in the butchering business shall be eligible to hold the office of commissioner or inspector under this act.

Oath and bond. SEC. 36. Any person who shall receive an appointment to the office of inspector under this act, before entering upon the performance of his duties shall take the oath of office prescribed by law, and shall file a bond in the sum of five hundred dollars with the county recorder in the county of his district, executed by himself, and with two good and sufficient sureties to the Territory, to be approved by the chairman of the board of supervisors of such county, conditioned upon the faithful performance by him or his regularly appointed deputy of the duties of the office.

Location. SEC. 37. Any person or persons, firm or corporation engaged in the slaughter of live stock for sale in any city, town, or village in this Territory shall slaughter all such animals in a fixed and definite slaughterhouse or slaughter pen, to be kept by such person or persons for that purpose; said slaughterhouse or slaughter pen must be within four miles of the limits of said city, town, or village.

Inspector to be notified. SEC. 38. It shall be the duty of any person, persons, firm, or corporation carrying on the business of slaughtering said animals to notify the nearest inspector appointed under this act of the location of his or their slaughterhouse or slaughter pen, and of the time and times when such person or persons propose to slaughter any such animals.

Duty of inspector; tagging hides. SEC. 39. It shall be the duty of said inspector to keep a general supervision of such slaughtering places, to notify the chairman of said board and the district attorney of the proper county of any person, persons, firm, or corporation who is or are evading any of the provisions of this act; to personally or regularly appoint deputy inspectors for health, for marks and brands, and tag the hides of all said animals slaughtered for sale in their respective districts, and inspect such hide or hides, and put a tag on the left side of the neck of each hide with a tag seal furnished by the said board, and shall receive as compensation therefor the sum of twenty-five cents for each hide of horned or neat cattle inspected and tagged, to be paid by such butcher, which amount shall be deducted from the purchase price; to keep a record of their general description, their marks and brands, ages and sex of such slaughtered animals, as determined by examination of the hide, ears, and horns. Said record shall at all times be open to inspection to any person desiring to inspect the same. A duplicate record of all inspections shall be sent to the board, and triplicate given to the butcher at such times and under such rules and regulations as the board may adopt. Any person, persons, firm, or corporation selling, removing, or secreting any hide or hides, or detaching, obliterating, or defacing from or upon the hide any mark or brand before they are inspected and tagged shall be guilty of a misdemeanor, and shall be punished as hereinafter provided.

Duty of ranchmen; must preserve hides. SEC. 40. Any ranchman, trader, or any other person not regularly engaged in carrying on the business of slaughtering neat or horned cattle at some known and established slaughter place within four miles of some city, town, or village within the limits of this Territory, who

shall slaughter any neat or horned cattle for sale, on their ranches or elsewhere, shall, before offering the meat for sale in any city, town, or village within the limits of this Territory, take such meat, together with the hide, to a regularly appointed inspector, and shall have the hide inspected and tagged, immediately paying therefor twenty-five cents for each hide inspected and tagged. All persons not engaged as butchers who shall at any time kill or slaughter, or cause to be killed or slaughtered, any cattle either for his or their own use and consumption, or for sale, shall retain or cause to be retained in his or their possession the hides taken off such animal or animals, with the earmarks attached thereto, without any alteration or disfiguration of the brands or marks on said hide or ears, for the period of twenty-one days free to the inspection of all persons. And any person failing to keep the hides in the manner and for the time above mentioned, or shall refuse to any person the inspection of such hide or hides, shall be guilty of a misdemeanor, and upon conviction shall be fined in any sum not exceeding two hundred dollars: *Provided*, That anyone may immediately sell or otherwise dispose of the hides of any animal as soon as it is duly inspected and tagged by an authorized inspector.

Bond. SEC. 41. Before any person, persons, firm, or corporation shall begin, enter upon, or carry on the business of slaughtering animals for sale, or for the sale of meat, such person, persons, firm, or corporation shall first give bond, with two or more good and sufficient sureties, to the Territory of Arizona in the penal sum of one thousand dollars, to be approved by the chairman of the board of supervisors of the county in which such business is to be carried on, conditioned that such person, persons, firm, or corporation shall not slaughter or expose for sale any neat animal, or the meat thereof, without first being the legal and equitable owner thereof, as well in law as in fact, and that in case such person, persons, firm, or corporation shall slaughter or sell, or expose for sale, any neat animal or the meat thereof, as aforesaid, shall pay therefor double the value of any such animal, the same to be recovered by action on said bond in the name of the true owner of such animal. The amount so recovered shall be paid as follows: One-half to the owner of such animal, one-fourth to the inspector or person discovering the wrongful possession or slaughtering of such animals, and the remaining one-fourth to the said board.

Records and reports. SEC. 42. Any person who shall set up or carry on the business of butchering or slaughtering of horned cattle or swine in this Territory shall keep a true and faithful record, in a book to be kept for that purpose, of all live stock purchased or slaughtered by him, with a description of all animals so purchased or slaughtered, including all the marks, brands, ages, and weight of such animals, the name and residence of the person from whom purchased, and the date of such purchase, and shall at the end of each month make a true and correct copy of such record so required to be kept by this section, under oath, and deliver the same to the inspector of his district. Any such person, persons, firm, or corporation who fails to keep such record, or who fails and neglects to deliver a true copy of the record mentioned in this section, or who refuses to exhibit to any person demanding it the said record, is guilty of a misdemeanor, and shall be fined a sum not less than fifty dollars nor more than one hundred dollars for every day he shall have failed to comply with this section.

Transporting untagged hides; penalty. SEC. 43. It shall be unlawful for any railroad company to receive for transportation any hides until the same shall have been inspected and tagged as provided in this act. Any railroad company, or any officer, agent, or servant of a railroad company, who shall violate the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than one hundred dollars, and not more than five hundred dollars, in the discretion of the court.

Branding. SEC. 44. Every person, firm, company, or corporation owning horses, mules, asses, or neat cattle in this Territory shall have and adopt a mark and brand for such animals, by which they shall be marked and branded after such brand shall have been recorded as required by this act.

Evidence. SEC. 45. No brands, except such as are recorded under the provisions of this act, shall be recognized in law as any evidence of ownership of the horses, mules, asses, or neat cattle upon which such brand may be used.

Record. SEC. 46. Any brand recorded in accordance with the requirements of this act shall be considered as the property of the person causing such record to be made, and shall be subject to sale, assignment, transfer, devise, and descent, the same as other personal property.

Rules and regulations. SEC. 47. From and after the passage of this act the board shall be and constitute a board for the registration of brands on horses, mules, asses, and neat cattle in this Territory, and it shall make rules and regulations governing the recording and use of live-stock brands.

Brand book. SEC. 48. Immediately upon the passage of this act it shall be the duty of the said board to procure a suitable book, to be known as the Territorial brand book, in which shall be recorded the brands used for the branding of horses, mules, asses, and other neat cattle in this Territory.

Evidence. SEC. 49. For the purposes of this act and in all the prosecutions arising under the same, or in the prosecution of any offense arising under the laws of this Territory in regard to the unlawful taking, handling, killing, driving, or other unlawful disposition of animals of the bovine kind, the description "neat cattle" in any indictment shall be deemed sufficient, and the proof of the brand by a certified copy of the registration thereof in the Territorial brand book, under the seal of the said board, certified to by its secretary, shall be sufficient to identify all horses, mules, asses, or neat cattle, and shall be *prima facie* proof that the person owning the recorded brand is the owner of the animal branded with such brand.

Record of brand to be filed. SEC. 50. At any time before the first day of July after the passage of this act it shall be the duty of persons, firms, companies, or corporations owning brands and marks to file the same with the said board, and the said board shall record the same in a book of brands and marks, and shall furnish to the owners certificates thereof, under seal of the board, free of charge, which said certificates shall be competent evidence of the registration of such brand and *prima facie* evidence of ownership. It is hereby made the duty of said board to transcribe in a Territorial brand book all of said brands and marks. Thereupon all of said brands and marks shall be deemed to have been duly recorded in such Territorial brand book by the owners of said brands and marks. After said first day of July next no one shall file any brand which has before that time been filed by another. With the brand offered for registration before July first aforesaid, the owner shall furnish a certificate of the recorder of his county that the brand so offered for registration is the recorded brand of the owner, and the recorder shall charge twenty-five cents, and no more, for such certificate. Before registration the board shall ascertain by such rules and regulations as they may prescribe the real owner of the brand offered for registration, and the same shall be registered in the true name of the owner, and said board shall be held responsible in damages for duplicating certificates of brands to different owners.

Fees. SEC. 51. From and after the passage of this act any person, firm, company, or corporation desiring to adopt any brand or mark to be used for the branding of horses, mules, asses, or neat cattle in this Territory shall, before using the same, forward to the said board a facsimile of such brand or mark, defining the position on the animal upon which the brand shall be placed, together with a fee of fifty cents to pay for recording the same. Upon the receipt of such facsimile and fee, the said board shall immediately record the same in the Territorial brand book, unless such brand has already been recorded in behalf of some other person, firm, company, or corporation, or is of such a character as to conflict with such prior brand, in which case the said board shall not record such latter brand, and shall return such facsimile and fee to the party by whom the same was forwarded to them, with a statement of the reason for refusing to record the same.

Certified copy. SEC. 52. Upon the recording of any such mark, brand, or brands, as provided by the preceding sections of this act, the owner thereof shall procure from the said board a certified copy of such mark, brand, or brands, under the seal of said board, paying therefor the sum of fifty cents.

Recording. SEC. 53. From and after the passage of this act it shall be unlawful for any county recorder in this Territory to record any mark or brand unless the application to record the same is accompanied with a certificate from the said board to the effect that said mark or brand has been recorded in the Territorial brand book.

Publishing brand book; duplicate to be filed with county recorder. SEC. 54. It shall be the duty of the said board, within ninety days after the first day of July, A. D. 1897, to publish a brand book in which shall be given a facsimile or copy of all brands recorded in their office on the said first day of July, together with the owner's name and the

county wherein he resides. Such names and brands shall be arranged in the most convenient form for reference, and the following may be the form of the said brand book:

Date.	Name.	Residence.	Description of earmarks.	Description of brands.	Remarks.

Such book shall be bound in a good and substantial binding, and in such a manner that additional leaves may be added thereafter. One copy of such book shall be forwarded to the county recorder of each county, in whose office it shall be kept open for the inspection of all persons interested. It shall be the duty of said board quarterly, after the publishing of said brand book, to furnish each county recorder with a list of brands recorded in their office during the preceding three months, which list shall be printed in uniform style with the pages of such brand book, and shall be pasted in and become a part of such brand book when received by the county recorders of the respective counties. The said board is authorized to publish, if they deem best to do so, a limited number of such brand books in addition to the number required by the provisions of this section, and to sell the same for such price as the said board shall consider reasonable, which price shall not be less than the actual cost of the same, and from time to time to revise said Territorial records of brands by the cancellation of absolute and unused brands, and to provide by regulation for due notice of such revision.

Use of brands. SEC. 55. No person owning or claiming shall, in originally marking or branding horses, mules, asses, or neat cattle, make use of or keep up more than one mark or brand: *Provided*, That any person may own and possess such animals in many marks and brands, the same having been by him acquired by purchase or any other lawful manner, and bills of sale in writing, properly acknowledged, from the previous owner or owners of the animal or animals having such brands, or from the heirs, executors, administrators, or legal representatives of such owner or owners, shall be sufficient evidence of such purchase; but the increase of such animals so acquired by such person from other live stock owned by him shall be branded by and with the recorded brand and mark of the person acquiring such animals: *Provided*, That in case where live stock having upon them a duly recorded brand may have had established against them a mortgage or other lien it shall be lawful for either of the parties interested in such lien, for the purpose of identification of the animals covered by such lien, upon filing with said board a duly certified copy of such mortgage or other lien, to adopt and record in the same manner as an original brand a special brand to be placed upon the animals subject to such lien and their increase for the identification of such animals during the pendency of such lien.

Minor brands. SEC. 56. Minors owning horses, mules, asses, or neat cattle separate from that of the parent or guardian may have a mark or brand which shall be recorded in accordance with the requirements of this act, but the parent or guardian shall be responsible for the proper use of such mark and brand by any such minor.

Bill of sale. SEC. 57. Upon the sale, alienation, or transfer of any horses, mules, asses, or neat cattle by any person in this Territory the actual delivery of such animals shall be accompanied by a written bill of sale from the vendor or the party selling to the party purchasing, giving the number, kind, or marks and brands of each animal sold and delivered, which bill of sale shall be signed by the party giving the same, and shall be acknowledged by him as his act and deed before some officer authorized under the laws of the Territory to take acknowledgments of deeds of conveyance; and upon the trial of any person charged with the theft, unlawful possession, handling, driving, or killing of any such animal as is mentioned in this section, the possession of such animal by the accused without his having a duly written and acknowledged bill of sale therefor, such as is required by the provisions of this section, shall be *prima facie* evidence against the accused that such possession was illegal; and no officer acknowledging any bill of sale or other written instrument required to be acknowledged under the provisions of this act shall be authorized to exact or receive a larger fee than twenty-five cents for acknowledging, certifying to, and affixing his seal to such instrument.

Venting. SEC. 58. Every person who sells horses, mules, asses, or neat cattle must vent or counter-vent such animals, and said vent or counter-vent must be upon the same side of the animal as the original brand. A legal vent shall be a stamp iron of record: *Provided*, That animals sold to be slaughtered or shipped out of the Territory need not be vented.

Sales of estrays. SEC. 59. Whenever any live stock branded with any brand not duly recorded, as required by the provisions of this act, shall be found at large upon any range in this Territory, the same shall be reported to the said board by any duly authorized inspector and detective therefor, and shall be considered as unclaimed live stock, and shall be disposed of as now provided by law for the disposition of unclaimed live stock.

Written authority. SEC. 60. Any person, company, or corporation owning a recorded mark and brand and being the owner or owners of animals of the horse, mule, ass, or neat cattle kind, branded with such recorded brand, or who shall be the lawful owner of such animals having other brands, who may wish to authorize any other person or persons to gather, drive, or otherwise handle any of said animals by their mark and brand, shall furnish to such person or persons an authority in writing containing the list of the marks and brands authorized to be handled, and authorizing the person therein named to gather, drive, or otherwise handle the stock therein described; and the possession of such written authority shall be deemed sufficient to authorize the person or persons therein named to gather, drive, or otherwise handle any of such animals in the marks and brands set forth and described in the said written authority: *Provided*, That if any person, firm, company, or corporation, in giving any such written authority as is provided in this section, shall insert therein any mark or brand of which said person, firm, company, or corporation is not the lawful owner, and any animal having any such mark or brand shall be unlawfully taken, gathered, driven, or otherwise unlawfully handled by the person or persons having such written authority and by virtue thereof, then the person, firm, company, or corporation giving such written authority shall be deemed principals to the unlawful taking, gathering, driving, or handling of such animal or animals.

Sale of herd on range. SEC. 61. The owner or owners of horses, mules, asses, or neat cattle running at large upon any range in this Territory may dispose of such animals by range delivery while on the range and ungathered, by the sale and delivery of the marks and brands of such animals; but in every such case the purchaser, in order to acquire title to such animals, must have his conveyance or written transfer of such animals described by marks and brands, duly acknowledged by the vendor and then recorded in the office of the county recorder of the county in which said animals range, in a book kept for such purposes, and such sale or transfer shall be noted on the record of original marks and brands in the office of said board.

Brand prohibited. SEC. 62. Any person who shall mark or brand any unmarked or unbranded horse, mule, ass, or neat cattle found running at large upon any range in this Territory with a mark or brand that has not been recorded under the provisions of this act, or who, for the purpose of branding horses or cattle, uses as a brand a sash, frying pan, or any device whatsoever which can be employed or used to obliterate a brand, and every person who shall use any unrecorded brand which is an infringement upon any recorded brand, or who shall use a like brand in the same position or place recorded by another, shall be deemed guilty of larceny of said animal.

Prohibition of taking up. SEC. 63. Hereafter it shall be unlawful for any person to take up from any range, ranch, farm, corral, yard, or stable any horse, mule, or other animal and use the same without the consent of the owner of any such animal, or of the person having the same in charge.

Manner of taxing. SEC. 64. Live stock so branded shall be listed for assessment, and taxes assessed against the same shall be collected in the same manner as is provided for the assessment and collection of taxes upon real estate; and such assessments shall constitute a lien for taxes on all the stock in that brand: *Provided*, That if the owner of any brand shall sell any number of cattle less than the entire number under any brand before the taxes are due, such owner shall be permitted to pay taxes on the number sold proportioned to the number assessed in any such brand, and the amount shall be credited on the amount due under the assessment against any such brand.

Fences on railroad right of way. SEC. 65. In all cases where the live stock of any person is injured or killed by locomotive or cars on any portion of the line of any railroad company within this Territory, unfenced by good and sufficient fence, or other barriers sufficient to turn live stock, by the company or corporation running such locomotive or cars, shall be liable in damages therefor to the owner of such live stock, to be recovered in any court of competent jurisdiction within this Territory, unless it be shown on the trial of any action instituted for the recovery of such damages that the owners of such live stock, his agent or servants, immediately contributed to such killing or injury; the mere straying of live stock upon unfenced portions of such railroad shall not be held upon the trial of causes brought under this act to be any evidence of contributing negligence on the part of the owner of such live stock, nor shall the grazing of the same unattended by a herder be so considered.

Killed or injured stock; railroad liability.

SEC. 66. Every railroad corporation or company operating any railroad or branch thereof, within the limits of this Territory, which negligently injures or kills any horse, mare, gelding, filly, jack, jenny, or mule, or any cow, heifer, bull, ox, steer, or calf, or any other domestic animal, by running any engine or engines, car or cars, over or against any such animal, shall be liable to the owner of such animal for the damages sustained by such owner by reason thereof. The killing or injury shall be *prima facie* evidence of negligence on the part of such corporation or company.

Owners liable for damages.

SEC. 67. If the owner or owners, or his or their duly authorized agent or agents, of any animal or animals heretofore mentioned shall drive the same upon the track of any such corporation, association, company, person or persons, with the intent to thereby injure it or them, and such animal or animals or shall be killed or injured, such owner or owners shall be liable for all injury or damage occasioned by reason of such act, and shall be punished as provided in the penal code for felony.

Record by section foremen of stock killed.

SEC. 68. Hereafter it shall be the duty of all railroads in this Territory to require all section foremen, while in their employ and service as such, to keep at the section house a specific record upon forms furnished by said board, of all stock killed or crippled upon their respective sections of such railroad, giving age, color, sex, marks, and brands of all such stock so killed or crippled, which record shall be open and free for inspection by the public at all reasonable times.

Railroad crossing.

SEC. 69. Any railroad, corporation, or lessee, person, company, or corporation operating any railroad in this Territory which may hereafter fence their right of way, shall make crossings through their fence and over their roadbed along their right of way, at least every five miles thereof, or as near thereat as may be practicable.

Width.

SEC. 70. Such opening shall not be less than sixty feet in width. The said railroad company or lessee, person, corporation, or company operating any railroad shall place cattle guards and wing fences in either side of the said openings, sufficient to prevent any cattle entering upon the said right of way so enclosed.

Railroad bridges.

SEC. 71. Such railroad company, lessee, person, or corporation operating any railroad, shall leave unfenced any places wherein the said railroad run over any trestles, or bridges that are sufficiently high for cattle to go under the same.

Penalty.

SEC. 72. Any railroad company, lessee, person, or corporation operating any railroad in this Territory violating any of the provisions of sections 68, 69, 70, or 71 of this act, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall, in any court of competent jurisdiction, be fined in a sum of not less than one hundred dollars, and not more than three hundred dollars.

Inspection to be made in daylight; in pens or corral.

SEC. 73. All inspections of live stock made by live stock inspectors or detectives, under this act, shall be made in daylight, and the inspection of horses, mules, asses, and cattle shall be made when pens will admit, by driving such animals into a pen or corral, in bunches of not more than five, and held in such pen or corral until the inspector shall personally see and inspect each and every mark and brand, and mark the same on his record or tally, and when he has so inspected and tallied such cattle, and is satisfied as to the

same, he shall order them driven out and another bunch driven in such pen or corral in like manner, and so on until the entire herd is inspected.

Must inspect in manner prescribed. SEC. 74. Any inspector or detective of this Territory who shall inspect cattle in any other manner than that prescribed in section 73 of this act, or any owner, employee, or other person who shall oppose, obstruct, hinder, or attempt to obstruct or hinder by act or suggestion, such inspection as prescribed in section 73 of this act, shall be guilty of a misdemeanor, and fined not less than fifty dollars and not more than three hundred dollars, or imprisoned in the county jail not more than ninety days.

Penalty. SEC. 75. Any person violating any of the provisions of this act, the penalty for which is not otherwise specially provided for, shall be adjudged guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than ten dollars nor more than three hundred dollars, or be imprisoned in the county jail for not less than ten days, nor more than six months, or by both fine and imprisonment, in the discretion of the court: but nothing in this act shall be construed to repeal any existing law in imposing penalties for the unlawful taking, driving, killing, branding, defacing or brands, or other unlawful handling of any of the kinds of animals mentioned in this act.

Justice of the peace. SEC. 76. Justices of the peace within their respective counties, within the limits of their jurisdiction, shall have cognizance of all cases arising under the provisions of this act.

Duty of prosecuting attorney. SEC. 77. It shall be the duty of the prosecuting attorney of the proper county to prosecute on behalf of the Territory all criminal cases arising under this act.

Attorney-general. SEC. 78. It shall be the duty of the attorney-general at all times to advise with said board whenever called on; to give opinions in writing in response to requests by the said board, and to appear in any cause on behalf of the board, its agents, or employees.

Repealing clause. SEC. 79. All acts and parts of acts in conflict with this act are hereby repealed. Sections 973, 980, and 981 of the criminal code of Arizona are hereby repealed. Section 321 of the revised statutes of Arizona is hereby repealed. Title LIX, chapter one, chapter two, chapter three, chapter four, and chapter five of said statutes are hereby repealed; and all acts and parts of acts repealed by said chapters are hereby repealed. Section 1, act No. 5 of the laws of 1889, approved March 13, 1889; act No. 45 of the laws of 1889, approved March 21, 1889; act No. 54 of the laws of 1889, approved March 21, 1889; act No. 105 of the laws of 1891, approved March 9, 1891; act No. 58 of the laws of 1893, approved April 10, 1893; act No. 22 of the laws of 1895, approved March 14, 1895; act No. 52 of the laws of 1895, approved March 21, 1895; act No. 54 of the laws of 1895, approved March 21, 1895; act No. 57 of the laws of 1895, approved March 21, 1895, are hereby repealed.

Saving clause. SEC. 80. The repeal of the foregoing sections, acts, and parts of acts, shall in no way affect any rights that have accrued or any actions pending.

SEC. 81. This act shall take effect and be in force from and after its passage.

Approved March 1, 1897.

ARKANSAS.

AN ACT to protect the horse, the mule, jack, and jennet of the State from contagious diseases.

Be it enacted by the General Assembly of the State of Arkansas:

Importation of diseased stock prohibited.

SECTION 1. If any person or persons shall willfully and knowingly drive or bring into this State any diseased horse, mule, jack, or jennet affected by diseases known as "nasal gleet," glanders or farcy or any other contagious or infectious disease, or shall drive or ship from one part of this State to another, unless it be to remove them from one piece of land or ground to another piece of land of the same owner, or if any person shall knowingly sell any diseased horse, mule, jack, or jennet they shall be deemed guilty of a misdemeanor.

Prohibited territory. SEC. 2. If any person shall bring into this State any Missouri, or Western horses, mules, jacks, and jennets which have not been kept at least twelve months north of the northern boundary line of the State of Missouri and twelve months east of the west boundary line of the State of

Iowa, he shall be deemed guilty of a misdemeanor: *Provided*, That nothing herein contained shall be construed to prevent or make unlawful the transportation of such horses, mules, jacks, and jennets through the State on railways, or prohibit driving through any part of this State or being in possession of said horses, mules, jacks, and jennets between the first day of April and the tenth day of July following: *Provided further*, That this act shall not apply to actual *bona fide* persons moving into this State and bringing their horses, mules, jacks, and jennets with them.

Misdemeanor, penalty. SEC. 3. Any person or persons, railroad company or owner of steamboats who shall violate any of the provisions of this act shall be fined in any sum not to exceed three hundred and not less than one hundred dollars.

Power of limitation or extension. SEC. 4. That the commissioner of mines, manufactures and agriculture is hereby empowered and authorized to extend or limit the operation of this act whenever, in the opinion of said commissioner the importation of horses, mules, jacks, and jennets of the class mentioned in this act might transmit some of the diseases mentioned in this act, or some other contagious or infectious disease.

SEC. 5. That this act take effect and be in force from and after its passage and that all laws and parts of laws in conflict herewith be, and the same are hereby, repealed.

Approved February 5, 1897.

AN ACT to prohibit the driving or transporting of cattle across the United States cattle quarantine line in the State of Arkansas.

Be it enacted by the General Assembly of the State of Arkansas:

Cattle not to be driven across quarantine line; exception. SECTION 1. That it shall hereafter be unlawful for any person or corporation to drive or transport any cattle from south to north across the cattle quarantine line within the State of Arkansas, as the same is now or hereafter may be fixed by the proper authorities of the United States: *Provided*, This act shall not apply to persons or corporations driving or transporting cattle across said quarantine line as infected cattle or as cattle from infected districts, or to persons driving any cattle across said line during the time it is not prohibited by the United States authorities.

Penalty. SEC. 2. That any person or corporation who shall violate the provisions of this act, being either the owners of such cattle, or carriers or driver for hire or otherwise, shall be deemed guilty of a misdemeanor, and upon conviction thereof be fined in any sum not less than \$50 nor more than \$200.

Power of citizens and officers; expenses. SEC. 3. That any citizen of this State shall have the power, and it shall be the duty of all peace officers of the respective counties of this State, to stop any cattle driven or transported or being driven or transported across said quarantine line from south to north, and impound and drive or transport said cattle back south of the said quarantine line; and all costs and expenses incurred by such citizens or peace officer incurred in impounding or driving such cattle back south of said quarantine line shall be taxed as cost against the person or corporation convicted of the unlawful driving of such cattle across said line in violation of this act.

SEC. 4. That the courts of competent jurisdiction in any county north of said quarantine line, through which or into which such cattle shall be driven, shall have cognizance of violations of the provisions of this act.

SEC. 5. That this act shall be in effect from and after its passage.

Approved April 19, 1895.

CALIFORNIA.

AN ACT to regulate quarantine, and the admission of horses, cattle, sheep, and swine into the State of California from infected districts.

Quarantine against entry of domestic animals. SECTION 1. The State board of health shall be empowered to declare quarantine against the entry of domestic animals from any State or Territory, or any foreign port or country, in which contagious or infectious diseases are known to exist; said infected parts to be named in the proclamation.

Entry through State board of health. SEC. 2. All domestic animals coming into the State from districts mentioned in section one must be required to enter the State at such points only as the State board of health may by proclamation determine, and designate where they must be unloaded for inspection.

Evidence of owners. SEC. 3. All owners of domestic animals coming into this State from localities quarantined against will be required to furnish the following evidence that such animals are free from disease: *First.* The affidavit of two disinterested parties, who have known such animals for a period of four months prior to the date of shipment, that they have been healthy, and exposed to no contagious disease, and that no contagious disease is known or believed to exist in the district or country from which they came. *Second.* The certificate of the county clerk of the county, that persons making such affidavit are responsible and reputable citizens of the county. *Third.* The affidavit of the owner or person in charge, made at the point of entry, that such domestic animals are the identical animals described in the foregoing affidavits, and that shipment has been direct, and without unloading, except for food and water, and in cleansed and disinfected cars.

Affidavit of owners. SEC. 4. Owners or persons in charge of domestic animals from localities not named in such proclamation must certify, under oath, that such domestic animals have been kept in one place for a period of four months immediately preceding the date of shipment (giving the name of the town and county and State, Territory, or country), and have not been exposed to any contagious disease for a period of three months prior to the date of shipment.

Evidence to be submitted. SEC. 5. All the foregoing evidence to be submitted to the State veterinarian, or an authorized inspector of the State, when permits for shipment in this State shall be issued.

Quarantined calves. SEC. 6. Dealers' calves gathered in quarantined States or Territories will be quarantined at the points of entry.

Domestic animals. SEC. 7. Domestic animals not receiving permits for shipment, and retained in quarantine, will be held at the owner's risk and expense.

Same. SEC. 8. All domestic animals arriving at points of entry shall be inspected free of charge to the owner.

Railway company must have permit. SEC. 9. No railway company doing business in this State shall receive for shipment into this State any domestic animals unless accompanied by a permit signed by an authorized inspector.

Cattle, when not to enter State. SEC. 10. No cattle shall enter this State from Texas, New Mexico, or Mexico, for grazing purposes during the months of March, April, May, June, July, August, September, October, and November in each year.

Shipment for slaughter. SEC. 11. All cattle from those parts mentioned in section ten entering this State during the months mentioned in section ten, and intended for butchering purposes, shall pass from the point of entry into the slaughterhouse yard, which yard shall be specially constructed and isolated for the purpose of receiving such stock. The stock shall be unshipped in said yard direct from the cars running into the yards for that purpose.

Character of cars. SEC. 12. Said cattle shall, moreover, be shipped in specially constructed cars, which will prevent the dropping of manure and urine on the track during transit, and in unshipping such cattle the cars shall be thoroughly disinfected with carbolized whitewash.

When may be unshipped. SEC. 13. All cattle entering this State for the purposes mentioned in section eleven shall only be unshipped between the point of entry and destination at places set apart by the State board of health in its proclamation; and no native stock shall be allowed at any time to enter said places; said places shall be, moreover, thoroughly disinfected in such manner as the State board of health may direct.

Violation of act. SEC. 14. Any person or persons, corporations, or firms, who shall violate any of the provisions of this act shall be liable for all damages sustained, and a fine of one thousand dollars, to be recovered in

any court of competent jurisdiction, on account of any contagious or infectious disease being communicated from any diseased animal to any other animal in the neighborhood, or along the line of such transportation of such diseased animals into or through this State, or from one part thereof to another; and the existence or presence of such contagious or infectious disease among the native cattle of this State on the same ranch with or in the vicinity of any such diseased animals, or along the line or route over which they were transported, shall be *prima facie* evidence that the same were affected with such disease at the time of being so removed or transported, and communicated it to such native domestic animals so affected therewith.

Definition. SEC. 15. The words "domestic animals" whenever used in this act shall be construed to mean and include horses, mules, asses, cattle, sheep, goats, and swine.

Inspectors to be appointed. SEC. 16. The State board of health are hereby authorized to appoint one inspector for each of the points of entry by railroad communication into this State, who shall reside at such point as may be designated by the State board of health, and shall receive such compensation for actual services as may be determined by said board, not to exceed one hundred dollars per month; such compensation to be paid out of any moneys in the State treasury not otherwise appropriated upon the warrants of the comptroller of state drawn upon the certificate of State board of health allowing the same.

SEC. 17. This act shall take effect immediately.

Approved March 19, 1889.

AN ACT to prevent the spread of contagious or infectious diseases among domestic animals.
The people of the State of California, represented in Senate and Assembly, do enact as follows:

SECTION 1. Any person or persons, company, or corporation, owning or having possession or control of any animal affected by any contagious or infectious disease, who shall fail to keep the same within an inclosure, or herd the same in some place where they will be secure from contact with other animals of like kind not so affected, or who shall suffer such infected animals to be driven on the public highway or to range where they will be likely to come in contact with other animals not so affected, shall be guilty of a misdemeanor, and, on conviction, punished by a fine of not more than five hundred dollars for each offense.

SEC. 2. This act shall take effect immediately.

Approved March 23, 1893.

CONNECTICUT.

AN ACT concerning contagious diseases among domestic animals.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Quarantine. SECTION 1. For the purpose of preserving the public health and preventing the spread of pleuro-pneumonia, tuberculosis, or other contagious diseases among domestic animals, the State board of agriculture shall, when in its judgment public safety demands, prohibit the introduction of any such animal into this State. When any such contagious disease exists in the State the said board may quarantine all infected animals or such as it may have reason to suppose have been exposed to contagion, prohibit the sale of milk or the products thereof or meat from such animals, prohibit any animal from passing over any of the public highways near the place of quarantine, enter any premises where domestic animals are kept, issue such orders concerning the ventilation and cleansing of barns and stables and the confinement of animals therein as it may deem necessary, and make all investigations and regulations required for the prevention, treatment, cure, and extirpation of disease, but the substance known as tuberculin, or any similar preparation, shall not be used except with the written consent of the owner of the animal. All orders and regulations made by said board shall be in writing, and a duplicate copy thereof sent to the secretary of the board, who shall record it.

Appraisalment. SEC. 2. No animal shall be appraised and paid for as provided in section 1708 of the General Statutes unless such animal shall have been owned and kept within this State for three months prior to condemnation.

Requirements by commissioner. SEC. 3. The State board of agriculture, or the commissioners on diseases of domestic animals, shall require all veterinary practitioners to report to them all cases of contagious diseases among live stock within forty-eight hours after they shall have become possessed of such knowledge.

Expenses. SEC. 4. The commissioners on diseases of domestic animals shall present the bills for their services and expenses to the governor, and they shall not be paid until the governor shall have examined and approved them, and shall have found such charges to be reasonable; and upon his approval thereof the comptroller shall draw his order upon the treasurer for the payment of the same.

SEC. 5. Sections 1699 and 1708 of the General Statutes are hereby repealed.

Approved July 2, 1895.

AN ACT in relation to domestic animals.

Be it enacted by the Senate and House of Representatives in Assembly convened:

Notification of arrival of cattle; penalty. SECTION 1. When any person shall bring any cattle from an adjoining State into this State he shall within six days thereafter

notify the commissioner on domestic animals hereinafter appointed, and such notice shall contain the number and sex of such animals and a true statement of their physical condition. Every person who shall knowingly violate any of the provisions of this section shall be fined not more than fifty dollars.

Quarantine. SEC. 2. When any contagious disease exists among domestic animals in this State, said commissioner may quarantine all animals infected with a contagious disease and prohibit the sale of all the products thereof, but no animal shall be quarantined that does not give evidence of disease by competent physical examination, and no animal shall be quarantined for more than thirty days.

Slaughter of diseased animals; determination of value. SEC. 3. If it shall appear to said commissioner that it would be for the good of the State that animals so quarantined should be destroyed, he may cause said animals to be killed: but no animal so quarantined shall be killed until its value has been adjudged by the owner and the commissioner, and if they cannot agree each shall choose a representative, who shall choose a third, and the three so chosen shall determine the value of the animal, and the value thus determined shall, when approved by the commissioner, be paid to said owner by the State upon the order of the comptroller. But no animal whose physical condition indicates that it is of no real value, and no animal that has not been in this State six months prior to its quarantine, shall be paid for by the State.

Physical examination. SEC. 4. The commissioner shall, at the request of the owner of any domestic animal or animals in this State, inspect the same by physical examination, and if he find them free from disease dangerous to the public health he shall so certify to the owner.

Duty of selectmen. SEC. 5. It shall be the duty of the selectmen in each town to report to the commissioner any animals infected with contagious disease.

Appointment of commissioner; term; salary. SEC. 6. For the purpose of carrying out the provisions of this act the governor shall biennially appoint a commissioner on domestic animals, who shall be a practical farmer and stock breeder of at least ten years' experience. Said commissioner shall receive a salary of fifteen hundred dollars per annum and his expenses while performing the duties of his office; he shall hold his office for the term of two years from and after the date of his appointment, and he may, with the approval of the governor, employ such assistants as may be necessary to discharge the duties of his office, and any expense so incurred shall be paid by the State upon the approval of the governor, and said commissioner shall annually report to the governor concerning his acts and expenses.

SEC. 7. Sections 1699, 1700, 1701, 1702, 1703, 1707, and 1709 of the General Statutes and chapter CCLXXXVIII of the public acts of 1895, and all acts or parts of acts inconsistent herewith, are hereby repealed.

Approved June 2, 1897.

AN ACT concerning glanders.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

Duty of agent of Humane Society. SECTION 1. Section 3671 of the General Statutes is hereby amended to read as follows: Any duly appointed agent of the Connecticut Humane Society may enter upon any premises where there are any animals supposed to be infected with the disease known as glanders or farcy and examine such animals; and such agent, at the expense of the Connecticut Humane Society, may call a veterinary surgeon to assist in making such examination; and if, in the opinion of said agent and surgeon, said animals or any of them are in fact infected with glanders or farcy, said agent shall thereupon notify, in writing, the owner or keeper of such animals, if known, that they have been examined and are believed to be so infected, and such notice shall be sufficient to charge said owner or keeper with legal knowledge of the fact; and if within the period of forty-eight hours from the reception of said notice said owner or keeper does not call some other veterinary surgeon to examine said animals, then the said owner or keeper shall separate said animals from contact with all other animals, excepting cattle, for a space of ten consecutive days. If, after the expiration of said period of ten days, the owner or keeper of said animal or animals shall still refuse to call a veterinary surgeon to examine said animals, the Connecticut Humane Society, by its agent and veterinary surgeon, shall make a second examination, and if they still believe said animal or animals to be in fact then infected with glanders or farcy, they shall so report, in writing, to the Connecticut Humane Society, and thereupon said society shall have power to order the destruction of said animal or animals. But if the owner or keeper of said animals shall, at any time between the first notification in writing and the report in writing to said society, call a veterinary surgeon to examine said animal or animals, then, if the veterinarian called by the said society and the veterinarian called by the owner or keeper cannot agree, they shall call a third veterinary surgeon, and a majority of the three so called shall determine the question as to whether said animal or animals are so infected or not. And if it is determined that said animal or animals are so infected, they shall be destroyed by said society and the expense of burial of said animal or animals shall be paid by the owner.

Veterinary surgeon. SEC. 2. The expression "veterinary surgeon," as used in this act, shall be construed to mean a veterinary practitioner who is the regular graduate of and holds a diploma from some duly authorized and incorporated veterinary college, and who shall have practiced in the State of Connecticut at least two years continuously next before said examination.

Expenses. SEC. 3. The expenses of the veterinary surgeon called in by the owner of such animals shall be paid by the owner, but the State shall pay a reasonable sum for the services and expenses of said third veterinary surgeon.

Disinfectant. SEC. 4. The owner or keeper of any animal found to be suffering with glanders or farcy shall immediately disinfect the stalls or buildings in which said animal has been housed and the harness used upon said animals.

Approved June 2, 1897.

DISTRICT OF COLUMBIA.

AN ACT to create a revenue in the District of Columbia by levying a tax upon all dogs therein, to make such dogs personal property, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States in Congress assembled:

Duty of Commissioners. SEC. 7. Whenever it shall be made to appear to the Commissioners that there are good reasons for believing that any dog or dogs within the District are mad, it shall be the duty of the Commissioners to issue a proclamation requiring that all dogs shall, for a period to be defined in the proclamation, wear good, substantial muzzles securely put on, so as to prevent them from biting or snapping; and any dog going at large during the period defined by the Commissioners without such a muzzle shall be taken by the pound master and impounded, subject to the provisions of section 3.

Approved June 19, 1878.

ORDINANCES AS REVISED, AMENDED, AND ADOPTED BY THE BOARD OF HEALTH
NOVEMBER 19, 1875.

AN ORDINANCE to revise, consolidate, and amend the ordinances of the board of health, to declare what shall be deemed nuisances injurious to health, and to provide for the removal thereof.

Nuisance declared; penalty. SECTION 19. That any animal affected by glanders or other contagious or pestilential disease kept or remaining in any stable, shed, pen, or place within the cities of Washington or Georgetown, or the more densely populated suburbs of said cities, is hereby declared a nuisance injurious to health; and any person keeping or maintaining such nuisance who shall fail, after due notice from this board, to abate the same shall, upon conviction, be fined not less than five nor more than twenty-five dollars for every such offense.

Hydrophobia; penalty. SEC. 25. That mad dogs, and dogs bitten by hydrophobic dogs, are hereby declared nuisances injurious to health; and any person owning or keeping any dog who shall allow the same to go unmuzzled upon any street, alley, or other public place, between the fifteenth day of May and the fifteenth day of October in any year, or who shall refuse to kill, or to cause to be killed, any such dog owned or kept by him which has gone mad, or given symptoms of hydrophobia, or who shall omit to confine any such animal exposed to such disease, or which has been bitten by a hydrophobic dog or animal, shall be deemed guilty of keeping and maintaining a nuisance, and upon conviction thereof shall be fined not less than one nor more than twenty-five dollars.

PUBLIC RESOLUTION—No. 30.

JOINT RESOLUTION legalizing the health ordinances and regulations for the District of Columbia.

Ordinances revised. *Resolved by the Senate and House of Representatives of the United States in Congress assembled,* That the ordinances of the late board of health of the District of Columbia, as revised, amended, and adopted November nineteenth, eighteen hundred and seventy-five, entitled "An ordinance to revise, consolidate, and amend the ordinances of the board of health, to declare what shall be deemed nuisances injurious to health, and to provide for the removal thereof," as printed in the report of said late board of health made to the first session of the Forty-fourth Congress, being Executive Document number one, part eight, be, and the same are hereby, legalized; and the respective penalties therein prescribed for violations thereof may be imposed and enforced for the respective offenses therein described, excepting the sections of said ordinance following, namely: Sections seven, nine, and fourteen, which said sections are not hereby legalized.

Approved April 24, 1880.

The above has been amended as follows:

Ordinances legalized. That the ordinances of the late board of health of the District of Columbia, as legalized by joint resolution of Congress, approved April twenty-fourth, eighteen hundred and eighty, be, and the same are hereby, declared to have the same force and effect within the District of Columbia as if enacted by Congress in the first instance, and that the powers and duties imposed upon the late board of health, in and by the said ordinances, are hereby conferred upon the health officer of said District, and that all prosecutions for violations of said ordinances and regulations shall be in the police court of the District of Columbia, in the name of the said District: *Provided,* That said regulations shall not be enforced against established industries which are not a nuisance in fact.

Approved August 7, 1894.

REGULATION FOR THE SUPPRESSION AND PREVENTION OF CONTAGIOUS, INFECTIOUS, AND COMMUNICABLE DISEASES AFFECTING DOMESTIC ANIMALS IN THE DISTRICT OF COLUMBIA.

OFFICE OF THE COMMISSIONERS OF THE DISTRICT OF COLUMBIA,
Washington, August 21, 1888.

Suppression of diseases. Whereas the eighth section of the act of Congress approved May 29, 1884, entitled "An act for the establishment of a Bureau of Animal Industry, to prevent the exportation of diseased cattle, and to provide the means for the suppression and extirpation of pleuro-

pneumonia and other contagious diseases among domestic animals," authorizes and requires the Commissioners to take measures for the prompt suppression of all contagious, infectious, and communicable diseases affecting domestic animals in the District of Columbia, to prescribe regulations for disinfection, and such other regulations as they may deem necessary to prevent infection and contagion, as provided in said section, do ordain, declare, and publish the following:

Duty of owner. *Ordered,* That all persons having the care or custody of any domestic animal in the District of Columbia affected or supposed to be affected with any infectious, contagious, or communicable disease shall isolate and forthwith report the same to the Chief of the Bureau of Animal Industry of the Department of Agriculture, or to some officer in said Bureau in said District, designating the place where the same may be found, and shall place the same at his disposal and observe and follow such directions as such chief or officer shall prescribe in such case.

Duty of veterinary surgeon. 2. That it is hereby made the duty of all veterinary surgeons in said District and sanitary inspectors of the health department of the District, and of every member of the Metropolitan police force, to inquire and report upon all known or suspected cases referred to in section 1 of this order.

Penalty for concealment. 3. That if any person or persons having the care or custody of any domestic animal in said District, affected or supposed to be affected as aforesaid, shall secrete or conceal the same, or use any device to conceal the same, or mislead the persons or officers who are charged with any duty with reference to such domestic animals, and all persons aiding therein, shall each suffer the penalty hereinafter described.

Powers of Bureau of Animal Industry. 4. That the Chief of the Bureau of Animal Industry only may cause the death of any so diseased, or supposed to be diseased, animal in said District upon order, oral or written, from him for the death of such animal, and shall also prescribe the mode and place of such death, which shall be strictly pursued in the destruction of said animal, and the bodies of such animals so killed shall be removed by the health officer of the District upon notice from said chief.

Penalty. 5. That every person who shall violate any of the provisions of this regulation shall be fined in any sum not less than ten nor more than twenty-five dollars for each offense, to be enforced in the police court of the District of Columbia in the name of the District, on information, etc.

Prevalence of disease. The Commissioners having learned that a dangerous communicable disease prevails among domestic animals in the vicinity of the District which by contagion or transportation may affect the general health and safety, the Commissioners, in pursuance of the provisions of section 8 of the act approved May 29, 1884, order the following measures for the prompt suppression of the same:

Bureau of Animal Industry empowered. 1. Upon the recommendation of the Commissioner of Agriculture, the Chief of the Bureau of Animal Industry in the United States Department of Agriculture is hereby authorized and empowered to act as veterinarian for the District of Columbia for the purposes named in the act above quoted.

Regulations of Bureau adopted. 2. So much of the rules and regulations prepared by the Commissioner of Agriculture in accordance with the requirements of the act aforesaid, and published under date of April 15, 1887,¹ as are applicable to the District of Columbia are hereby approved and adopted by the Commissioners as regulations for the District: *Provided,* That wherever said regulations require report and action by the Commissioner of Agriculture, the Chief of the Bureau of Animal Industry, acting as veterinarian for the District, shall submit the requisite reports and recommendations for the consideration of and action by the Commissioners of the District of Columbia.

Agents empowered. 3. The legally appointed agents and inspectors of the Bureau of Animal Industry are hereby empowered, under the direction of the Chief of the Bureau, to discharge corresponding duties for the District of Columbia, and all citizens of the District are hereby directed and required to recognize and respect the said Chief of the Bureau of Animal Industry and his duly appointed agents as lawful officers of the District.

¹ See p. 327.

Quarantine. 4. The said Chief of the Bureau and his agents are authorized to inspect any premises in the District of Columbia where it is believed there exists any contagious, infectious, or communicable disease among any domestic animals, and if found needful to order the temporary quarantine of said animals, to cause premises to be disinfected, and if necessary to condemn the animals to be killed in order to prevent the spread of the disease.

Appraisal of value. 5. The proceedings for the appraisal of the value of animals condemned to be killed shall be under the provisions of section 8 of the regulations.

Reports and recommendations. 6. The Chief of the Bureau aforesaid, acting as veterinarian for the District, shall make to the Commissioners monthly reports of all matters relating to the subject of this order within the District of Columbia, and in addition thereto special reports and recommendations as often as shall be needful for the information of the Commissioners to enable them to carry into effect the provisions of the law.

FLORIDA.

AN ACT to prohibit the introduction into this State and the sale therein of horses, mules, cattle, hogs, or other domestic animals which may be or are at the time of their introduction or sale suffering from diseases known as glanders, farcy, cholera, Texas fever, or other virulent, infectious, or contagious diseases, or which were known at the time of such introduction or sale to have been in contact with any of such animals having had any of such diseases, and prescribing penalties for the violation of this act.

Be it enacted by the Legislature of the State of Florida:

Prohibiting introduction of diseased animals.

SECTION 1. That hereafter it shall be unlawful for any person to bring into this State or to offer for sale therein any horses, mules, cattle, hogs, or other domestic animals, knowing at the time of such introduction or offering for sale of any such animals that they are suffering from diseases known as glanders, farcy, cholera, Texas fever, or other virulent, contagious, or infectious diseases.

Penalty. SEC. 2. That any person who shall knowingly violate the first section of this act shall be guilty of a felony, and upon conviction thereof shall be imprisoned in the State penitentiary for a term of not less than two years or more than four years, or shall be fined in a sum of not less than five hundred dollars or more than one thousand dollars, or by both such fine and imprisonment.

Approved May 25, 1895.

GEORGIA.

Abandoned and diseased animals. SEC. 1755 (4612b). For the purpose of putting an end speedily to the suffering of hopelessly diseased and disabled animals, any person finding any domestic animal which is abandoned, glandered, or otherwise diseased or injured past recovery and not properly cared for may apply to any justice of the peace of the county, who may summarily decide whether such animal should be destroyed. After giving notice to the owner, if known, whenever such notice can be given without defeating the object of this section. The order authorizing the destruction of such animal shall not defeat the owner's claim for damages against the person destroying or procuring the destruction of such animal.

Driving diseased cattle. SEC. 562 (4625d). Any person who shall knowingly drive or move, for the purpose of grazing, any cattle having the disease known as "murrain," or having any other distemper or infectious disease, to any place other than the place where the cattle at the time are so diseased, or driving work oxen or other cattle into or through such localities between April fifteenth and October fifteenth annually, shall be guilty of a misdemeanor.

Driving diseased cattle from infected localities. SEC. 563. Any person who shall willfully and knowingly drive or move, for the purpose of grazing, any cattle from any locality infected with a distemper or infectious disease, to any place in this State where cattle are not liable to have said disease (unless associated with cattle from localities infected with distemper or infectious disease), shall be guilty of a misdemeanor.

IDAHO.

AN ACT to create the office of sheep inspector for the State of Idaho, to provide for the appointment and to define the powers and duties of said officer and his deputies, and fixing his salary and the compensation of his deputies, and providing for the prosecution of offenses in said act, and to repeal an act entitled "An act for the appointment of sheep inspectors and to suppress and prevent dissemination of scab among sheep," approved March second, eighteen hundred and ninety-three.

Be it enacted by the Legislature of the State of Idaho:

Duty of governor. SECTION 1. The office of sheep inspector for the State of Idaho is hereby created. It shall be the duty of the governor, within twenty days from and after the passage of this act, to appoint some suitable, capable, and discreet person and practical sheep grower to fill said office.

Salary of inspector; term. SEC. 2. The State sheep inspector shall receive, as full compensation for his services, a salary of one hundred dollars per annum, to be paid as the salary and fees of other State officers are paid. He shall hold his office for the term of two years, and until his successor is appointed and qualified, unless sooner removed by the governor.

Bond of inspector. Before entering upon the discharge of his duties as such officer he shall file an official bond in the sum of five hundred dollars, conditioned for the faithful performance of the duties of his office, in form and manner as other official bonds of State officers.

Deputies. SEC. 3. Such State sheep inspector shall have power, and it shall be his duty, to appoint one or more deputy sheep inspectors for each county, upon petition of the majority of the sheep growers of such county. Such deputies shall be practical sheep men, who, before entering upon the duties of their office, shall take an oath, as required by county officers, and shall give a bond to the State of Idaho in the penal sum of two thousand dollars, conditioned for the faithful performance of the duties of deputy sheep inspector, the sureties to be approved by the State sheep inspector and to be placed on file in his office. Such deputies shall be subject to removal by the State sheep inspector.

Duty of inspector. SEC. 4. It shall be the duty of the State sheep inspector to have general supervision over his deputies appointed under the provisions of this act, and to aid, counsel, and advise with such deputies and generally to enforce the provisions of this act.

Duty of deputies. SEC. 5. The deputies appointed under the provisions of this act shall have power to administer oaths, and it shall be the duty of at least one deputy inspector, in each county where the same may be appointed, the same to be designated by the State sheep inspector, to personally examine all sheep and bands of sheep in his county every spring between the first day of April and the first day of June and every fall between the first day of October and the first day of December for the first two years after the passage of this act, and thereafter between the first day of April and the first day of June of each year; and to the owners or persons in charge of herds found to be clean he shall issue a certificate stating such fact, which certificate shall permit such herds to pass into and through any and all counties in this State so long as they shall remain free and clean from disease. And such deputy also is required to examine any band or bands of sheep at any time that he may be called upon to do so at the request of one or more sheep growers in writing, stating that such sheep are affected or infected with some infectious or contagious disease, and that there is imminent and immediate danger of the spreading of such disease: *Provided*, That if, upon examination, such sheep are found to be clean the person or persons making such complaint shall pay the expense and costs of such examination, which may be recovered in a civil action therefor; but in case such inspector, upon making such examination, finds said sheep diseased, he shall forthwith issue his order quarantining said sheep: *And further provided*, That all bands of sheep of less than two hundred and fifty head shall not be subject to such inspections when known to be sound; but where complaint is made, then the deputy inspector must comply with and enforce the provisions of this act as in other cases hereinafter provided for.

Certificate. SEC. 6. Any person, persons, company, corporation, or association intending to bring, or cause to be brought, from any other State or Territory into any of the counties of the State of Idaho any sheep, he or they must first obtain from a deputy sheep inspector, appointed under the provisions of this act, a certificate that said sheep are sound and free from all contagious or infectious disease before crossing the boundary line of said county;

and it shall be the duty of every deputy sheep inspector, at the request of any person, persons, company, corporation, or association owning or controlling any sheep in his county, or within twelve miles of the line of said county, upon being tendered the amount of his compensation for other special examinations as herein provided, to, with all convenient speed, examine any sheep he shall be requested to examine; and if such sheep be found free from all contagious and infectious disease and perfectly sound, to give his certificate of such fact to the applicant therefor, which certificate shall be a permit as provided for in section five of this act. Any person or persons violating any of the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction they shall be punished by a fine of not less than one hundred dollars nor more than three hundred dollars.

Permit; penalty. SEC. 7. Any person, company, association, or corporation desiring to move his or their sheep which are not sound or are infected or affected by scab or any infectious or contagious disease, shall obtain from a deputy inspector a traveling permit. Such permit shall only be granted for the purpose of moving said sheep to some place where they may be dipped for said disease, and by such route as the deputy sheep inspector may designate; and any person, persons, company, corporation, or association injured or damaged by reason of the moving of said sheep shall be entitled to recover from the person, persons, company, corporation, or association moving the same, by a civil action, the amount of damage, direct and consequential, sustained thereby. And any person or persons violating any of the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than one hundred dollars and not more than two hundred and fifty dollars.

Dipping. SEC. 8. Whenever upon an examination of any bands or herds of sheep, kept or herded in any county of the State of Idaho, the deputy sheep inspector of such county shall find such sheep, or any portion of them, affected or infected with the scab or scabies, or any other infectious or contagious disease, he shall forthwith notify the owner, or person in charge of said sheep, in writing, to dip said sheep for said disease within a period of fifteen days from said notice; and also during such period to keep such sheep from contact with other sheep by

Penalty for neglect. such means as he may specify; and if, upon examination at the end of fifteen days from such notice, said deputy sheep inspector shall find that said sheep have not been dipped for said disease, or have not been kept from contact with other sheep that are sound, the owner or owners, or person or persons controlling said sheep, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than one hundred dollars nor more than two hundred and fifty dollars; and in case said sheep have not been dipped for said disease within said fifteen days, such deputy sheep inspector shall immediately take possession of said sheep and dip them for said disease, and all expenses incurred in so doing, including a compensation of four dollars for every day, or part of a day, in which said deputy sheep inspector may be engaged in dipping said sheep, shall become and is hereby made a lien upon said sheep; and such deputy sheep inspector shall hold such sheep for the period of ten days, and if the same is not paid within such time he may collect the same, together with the cost and expense of collection, by advertising and selling said sheep, or as many thereof as may be necessary, in the manner prescribed by law for the sale of personal property on execution. If, however, upon examination at the end of fifteen days from the notice required to be given under this section such deputy sheep inspector shall find that said sheep have been dipped for said disease, but are still infected with the same, then he shall instruct the owner or controller of said sheep to dip once, or more times, as circumstances demand, and as soon as possible, but with an interval between the dippings of not less than nine nor more than twelve days; and if upon examination at the end of thirty days further, such deputy sheep inspector finds that said sheep have been dipped for said disease, but are still affected, then he shall at once take possession of said sheep and dip them for said disease as above specified. If, however, upon examination he finds that said sheep have not been dipped, he shall seize said sheep and dip them for said disease as above specified, and the owner or owners, or controller, by reason of his failure to dip such sheep as required, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than one hundred dollars nor more than two hundred and fifty dollars:

Exceptions to dipping. *Provided, however,* That no person, persons, company, or corporation shall be required to dip his or their bands of sheep between the first day of December and until such time as he or they can shear such sheep in the following spring; and it is further provided, No person,

persons, company or corporation shall be required to dip a band or bands of ewes, or any part of them in which there are ewes with lambs, at any time between the fifteenth of March and the fifteenth of May following of any year; but they must be held in quarantine and kept separate from sound sheep, and the owner, owners, or controller shall be responsible for all damages as stated in sections seven and eight of this act, to be enforced and recovered as therein provided for. It shall also be the duty of such deputy sheep inspector to require the owner, owners, or controller of sheep, while held in quarantine during the above exemption, to spot or hand dress all sheep in their band or bands that show any scab or other contagious disease, with some reliable medicine; and such deputy sheep inspector shall have power to enforce hand dressing or spotting during the exemption referred to in this section, the same as he has power to enforce dipping at any other period of the year, as provided by this act.

Salary. SEC. 9. The deputy sheep inspector appointed in the several counties as provided in this act shall receive four dollars per day for every day or part of a day spent in the performance of his duty, to be paid by the owner or owners of the sheep examined, and to be enforced as a lien against the sheep so examined, as provided in section 8 of this act.

Penalty for neglect of duty. SEC. 10. Any deputy sheep inspector granting a permit allowing sheep to travel, without at the time having first examined the sheep, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than one hundred dollars nor more than two hundred and fifty dollars.

Penalty for withholding information. SEC. 11. Any person or persons owning or having under their control sheep or bands of sheep which have become afflicted with scab or other infectious or contagious disease for a period of fifteen days without reporting such fact to the deputy sheep inspector of such county where such sheep are situate, in writing, shall be deemed guilty of a misdemeanor, and shall upon conviction thereof be punished by a fine of not less than twenty-five dollars nor more than two hundred dollars. Upon receiving such notice the deputy sheep inspector shall proceed as provided in section 8 of this act. Any person, persons, company, or corporation violating any of the provisions of this section, in addition to the penalty herein fixed, shall be liable in a civil action to the person, persons, company, or corporation injured thereby for all damages sustained in consequence of such violation.

Penalty for withholding information. SEC. 12. In any action or proceeding, civil or criminal, arising under this act, any and all persons having an interest in sheep or controlling the same, and concerning which such action or proceeding is had shall be deemed the owners of said sheep, and shall be liable severally and jointly for such violation of this act. Any herder or shepherd, or other person in charge of sheep, who shall willfully refuse to give a deputy sheep inspector any and all information as to the condition of sheep in his charge, requested by such deputy, shall be deemed guilty of misdemeanor, and upon conviction thereof shall be punished by a fine of not less than twenty-five dollars nor more than one hundred dollars. In criminal actions against corporations under this act no arrest shall be necessary, but a summons containing notice of the time and place of trial, together with a copy of the complaint filed before a justice of the peace, or in the court in which the action is commenced, shall be served in the same manner and for the same length of time as in civil actions.

Records. SEC. 13. It shall be the duty of each deputy sheep inspector appointed under this act to keep a book in which he shall record as complete a description as practicable of the marks and brands with which each person in his county marks or brands his sheep, and the owners of sheep shall report in writing to such deputy sheep inspector their marks and brands, for the purpose of aiding such deputy sheep inspector to make up and keep such records; said deputy sheep inspectors are also required to keep a book, in which they shall record the names of all persons prosecuted for violations of this act, together with a description of the particular offense charged against him, the name of the court in which said prosecution was had, and the result of such prosecution, giving the amount of fines where fines are assessed. And on the first day of January of each year, each deputy sheep inspector appointed under the provisions of this act shall make a report to the State sheep inspector, which report shall contain a true and correct copy of his record as contained in the books required by him to be kept under the provisions of this act, which report shall be placed on file in the office of the State sheep inspector.

Unlawful transportation; penalty. SEC. 14. It shall be unlawful for any person, persons, company, corporation or association, owning, controlling or managing any ferry boat, toll bridge, car, steamboat, or other things used for transportation, to allow any sheep to be carried thereon unless the party in charge of said sheep shall first produce a certificate from a deputy sheep inspector appointed under this act, that said sheep are free from scab, scabies and other infectious or contagious disease. Any violation of this section shall be deemed a misdemeanor and punishable by a fine of not less than one hundred dollars nor more than two hundred and fifty dollars.

Notification; penalty. SEC. 15. If any person or persons, company or corporation, in driving or herding any sheep, should get into their herd any stray sheep, they shall immediately notify the owner thereof; and if the owner is unknown, he or they shall forthwith notify the deputy sheep inspector of such county, giving the number of such sheep and the brands of each; and any person, persons, company or corporation violating the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than twenty-five dollars nor more than two hundred dollars.

Duty of deputy. SEC. 16. All deputy sheep inspectors are hereby given the power, and it is hereby made their duty to arrest and bring before a justice of the peace, or other court having jurisdiction of the same, any and all persons found violating the provisions of this act, where a complaint shall be filed by such deputy sheep inspector, either upon his own knowledge or upon information of such violation, whereupon a hearing shall be had as in other like criminal cases; and such deputy sheep inspectors are hereby vested with the same authority to arrest and to require aid in the execution of their said office as sheriffs and their deputies of the several counties of this state: *Provided*, That the provisions of this act requiring the deputy sheep inspectors of the county to prosecute for a violation of the provisions of this act, shall not be construed so as to prevent such prosecutions from being commenced and prosecuted by other persons as criminal actions are commenced and prosecuted in other cases.

Fees. The deputy sheep inspectors, as full compensation for their services in prosecutions, shall be allowed the following fees: For each arrest made under the provisions of this act the same fees and mileage allowed to sheriffs for like services, to be paid as other claims against the county.

Repeal. SEC. 17. An act entitled "An act for the appointment of sheep inspectors, and to suppress and prevent dissemination of scab among sheep," approved March second, eighteen hundred and ninety-three, and all acts and parts of acts in conflict with this act are hereby repealed.

SEC. 18. Whereas an emergency exists therefor, this act shall take effect and be in force from and after its passage.

Approved March 9, 1895.

ILLINOIS.

AN ACT to prevent the spread of contagious and infectious diseases among swine.

Be it enacted by the people of the State of Illinois, represented in the General Assembly:

Running at large. SECTION 1. That whoever being the owner of or having charge of any swine shall suffer the same to run at large shall be fined not less than three dollars nor more than ten dollars for each offense, and for every day he shall allow the same to run at large after having been once convicted under this act. The herding of any swine upon the grounds of another without the consent of the owner or person having control of such grounds shall be deemed a running at large under this act. The law providing for holding elections to vote upon the question of allowing domestic animals to run at large shall not be construed to apply to swine.

Duty of owners. SEC. 2. It shall be the duty of the owner or person having charge of any swine and having knowledge of or reasonable grounds to suspect the existence among them of the disease known as "hog cholera," or of any contagious or infectious disease, to use all reasonable means to prevent the spread of the same, and upon its coming to his knowledge that any of such swine has died of or been slaughtered on account of any such disease, to immediately burn or bury the same to a depth of two feet.

Diseased swine not to be moved. SEC. 3. No person shall convey upon or along any public highway or other public grounds, or any private lands, any diseased swine or swine known to have died of or been slaughtered on account of any contagious or infectious disease.

Penalty. SEC. 4. Any person convicted of a violation of sections two or three of this act shall be fined in any sum not less than five nor more than fifty dollars, and shall be held liable in damages to the person or persons who may have suffered loss on account of such violation.

Approved June 21, 1895.

INDIANA.

AN ACT to prevent the spread of contagious diseases among swine, defining the duties of railroad companies, stock-yard associations, the managers of fair grounds and individuals in relation thereto, defining certain misdemeanors, for making this act effective, fixing certain penalties for the violation thereof, and declaring an emergency.

Be it enacted by the General Assembly of the State of Indiana:

Duties of railway companies and managers of fairs.

SECTION 1. That it shall be the duty of all railroad companies and all stock-yard associations operating in this State to thoroughly cleanse and disinfect all cars in which hogs are shipped to their yards, immediately after unloading the hogs from the cars, and to keep their pens in which hogs are kept thoroughly cleansed and disinfected. And it shall be the duty of the managers of all fair grounds in the State, where swine are placed on exhibition, to thoroughly cleanse and disinfect and to keep cleansed and disinfected all the pens in which swine are kept, and all crates in which swine are brought to such fair shall be cleansed and disinfected immediately upon their being received at the fair grounds. And it shall be the duty of the managers of such fairs, before receiving any swine into such pens, to require and to take from the proposed exhibitor an affidavit that the swine presented for exhibition have not within the two months last past been exposed to any swine disease, and that he did, before shipping such swine, wash the same with a solution containing not less than one-tenth part of pure carbolic acid, and that the car in which such swine were shipped was thoroughly cleansed and disinfected before said swine were loaded in it.

Unlawful to drive or transport swine; carcasses to be burned.

SEC. 2. That it shall be unlawful for any person to drive upon any public highway, or suffer to run at large or to ship in any vehicle or railroad car, any swine, knowing the same to be infected with any disease, but the breeder or owner of any herd of swine which becomes infected with any disease may, within five days after the first indication that such herd is so infected, separate and ship and market all well and healthy hogs from such herd, and it shall be the duty of all breeders and owners of hogs in this State which die with any disease to burn each carcass to ashes within ten hours after death.

Infected swine denied access to running stream.

SEC. 3. It shall be unlawful for any one owning or controlling swine, knowing the same to be infected with disease, to allow such swine to have access to any stream of running water in this State, so that the water in such running stream to which such diseased swine have had access may flow down through the lands of others from where such infected herd is kept.

Penalty. SEC. 4. That any manager of any railroad company or the manager of any stock yards, operating in this State, who shall fail or refuse to cleanse and disinfect the cars at such yards, or fail to keep their pens cleansed and disinfected as required by this act, and any managers of fair grounds who shall fail or refuse to cleanse and disinfect their pens and crates and require from the exhibitor the affidavit required by this act, and any person who shall drive upon any public highway or suffer to run at large or ships in any vehicle or railroad car any swine, knowing the same to be infected with disease, and any breeder or owner of any herd of swine which becomes infected with any disease who, after five days from the time he discovers said herd is so infected, shall ship and market hogs from such diseased herd or shall fail and refuse to burn the carcasses of hogs in such herd dying from such disease, as provided in this act; if any owner or owners of any such hog or shoat so dying with disease or any person or persons

having the care or custody thereof having knowledge of the fact ten hours, or upon receiving notice thereof ten hours, shall fail, neglect, or refuse to comply with the provisions of the preceding section, it shall be lawful for any person or persons to enter upon the premises, after notifying the owner of the same where the carcass or carcasses of any hog or shoat may be, and burn such carcass or carcasses, committing no unnecessary damage, and for each carcass so burned he, she, or they may recover the sum of one dollar for each carcass so burned, in a civil action before any justice of the peace of the township where the defendant or one of the defendants resides, from the owner or owners of any such hog or shoat, or from any person or persons having the care and custody thereof; and any person who shall allow swine infected with any disease to have access to any stream of running water on his premises, then he and they or any person or persons who shall violate any of the provisions of this act, shall be deemed guilty of a misdemeanor, and upon conviction before any court having criminal jurisdiction shall be fined in any sum not less than twenty-five dollars and not more than five hundred dollars.

SEC. 5. Whereas an emergency exists for the immediate taking effect of this act, therefore the same shall take effect and be in force from and after its passage.

Approved March 5, 1897.

IOWA.

Duty of officers. SEC. 2339. The sheriff, constable, police officer, officer for any society for the prevention of cruelty to animals, or any magistrate shall destroy any horse or other animal disabled and unfit for further use.

Appointment of inspector. SEC. 2343. The board of supervisors of any county, when notified in writing by five or more sheep owners of such county that sheep diseased with scab, or any other malignant contagious disease, exist in such county, shall, at any regular or special meeting, appoint a suitable person as county sheep inspector, who shall take the oath of office, whose duties shall be as hereinafter prescribed, and whose term of office shall be for two years and until his successor is appointed and qualified.

Duty of inspector. SEC. 2344. It shall be the duty of the sheep inspector, upon the complaint of three or more sheep owners that any sheep within his jurisdiction have the scab, or any other malignant contagious disease, to immediately inspect and report in writing the result of his inspection to the county auditor, to be filed by him for reference by the board of supervisors or any party concerned. And if he deem it necessary, in order to prevent the spread of the disease to the sheep of other owners, he shall command the owner or agent to dip or otherwise treat such diseased sheep, and shall inspect such diseased sheep every month thereafter until such disease shall be eradicated.

Duty of inspector; salary. SEC. 2345. It shall be the duty of the sheep inspector to dip or otherwise treat such diseased sheep should the owner or agent refuse to do so, and all costs, expenses, and charges, together with a per diem of three dollars per day, shall be charged against the owner of such sheep, and shall be a lien thereon, and may be recovered in an action.

Salary. SEC. 2346. Such compensation for the inspector shall be three dollars per day, and shall be paid by the owner of the sheep, or his agent, if the disease is found to exist. In case no disease is found to exist, the complainants shall pay such fee.

Certificate; penalty. SEC. 2347. Upon the arrival of any flock of sheep within the State from a distance of more than twenty miles outside of the boundaries of the State, the owner or agent shall notify the inspector of the county in which such sheep are being held, and he shall inspect the flock at the expense of the owner or agent, and if the sheep are found sound shall furnish the owner or agent a certificate, which shall be a passport to any part of the State; but sheep in transport on board of railroad cars, or passing through the State on such cars, shall not come within the provisions of this section. Any violation of or failure to comply with this and the four preceding sections by the owners of any sheep shall subject him to a forfeiture of not to exceed one hundred dollars, which shall be a lien on such sheep, and shall be recovered in an action by the county attorney in the name and for the use of the county.

ERADICATION OF HOG CHOLERA.

AN ACT to cooperate with the United States in eradication of hog cholera or swine plague.

Rules and regulations. SEC. 2350. The governor is hereby authorized to accept, on behalf of the State, any rules and regulations prepared by the Secretary of Agriculture of the United States for the eradication of hog cholera or swine plague in one or more counties of this State, and he, together with the State veterinary surgeon, may cooperate with the Government of the United States for the objects of this act.

Right of inspector. SEC. 2351. The inspectors of the Bureau of Animal Industry of the United States Department of Agriculture shall have the right of inspection, quarantine, and condemnation of animals affected with hog cholera or swine plague, or suspected to be so affected, or that have been exposed to this disease, and for these purposes are hereby authorized and empowered to enter upon any ground or premises. It is hereby made the duty of sheriffs, constables, and peace officers to assist such inspectors when so requested; and said inspectors shall have the same powers and protection as peace officers while engaged in the discharge of their duties.

Compensation. SEC. 2352. Whenever any swine in the district specified in the regulations are found to be affected with or to have been exposed to hog cholera or swine plague, said swine may be condemned and destroyed; and the owners of all swine destroyed under the provisions of this act shall be entitled to receive a reasonable compensation therefor, but not more than the actual value in the condition when condemned. In case of failure on the part of the inspector and the owner to agree as to the amount of compensation, the swine shall be appraised by a board of citizens of this State, one of whom may be appointed by the inspector, one by the owner of the swine, and the two thus appointed shall select a third, and these together shall proceed to appraise the amount to be paid to the owner for the animals destroyed. Such appraisal shall be made under oath, and shall be final when the value of the animals does not exceed one hundred dollars; but in all other cases either party shall have the right of appeal to the district court, but such appeal shall not delay the destruction of the diseased or exposed animals.

Expenses. SEC. 2353. All expenses of quarantine, condemnation, and destruction of swine under the provisions of this act, and the expenses of any and all measures that may be used to eradicate hog cholera, shall be paid by the United States, and in no case shall this State be liable for any damages or expenses of any kind under the provisions of this act.

Penalty. SEC. 2354. Any person violating any order of quarantine made under this act, or any regulations prescribed by the Secretary of Agriculture and accepted by the governor of this State for the eradication of hog cholera, shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than twenty-five dollars nor more than one hundred dollars.

Compensation for animals destroyed. SEC. 2354. Whenever in the opinion of the State veterinary surgeon the public safety demands the destruction of any stock, the same may be destroyed upon the written order of such surgeon, with the consent of the owner, or upon approval of the governor, and by virtue of such order such surgeon, his deputy or assistant, or any peace officer, may destroy such diseased stock, and the owner thereof shall be entitled to receive its actual value in its condition when condemned, to be ascertained and fixed by the State veterinary surgeon and the nearest justice of the peace, who, if unable to agree, shall call upon the nearest or other justice of the peace upon whom they agree as umpire, and their judgment shall be final when the value of the stock, if not diseased, would not exceed twenty-five dollars; but in all other cases either party shall have the right of appeal to the district court, but such appeal shall not delay the destruction of the diseased animals. The veterinary surgeon shall at once file with the governor his written report thereof, who shall, if found correct, indorse his finding thereon, whereupon the auditor of State shall issue his warrant therefor upon the treasurer of State, who shall pay the same out of any moneys at his disposal under the provisions of this act, but no compensation shall be allowed for stock destroyed while in transit through or across the State, and the word "stock," as herein used, shall be held to mean cattle, horses, mules, and asses.

Importation; penalty. SEC. 5012. If the owner of sheep, or any person having the same in charge, knowingly import or drive into this State sheep having any contagious disease, or knowingly turn out or suffer any

sheep having contagious disease to run at large upon any common, road, or unclosed lands, or sell or dispose of any sheep, knowing the same to be so diseased, he shall be fined in any sum not less than fifty nor more than one hundred dollars.

Importation; penalty. SEC. 5013. If any person knowingly import or bring within the State any horse, mule, or ass affected by the diseases known as nasal gleet, glanders, or button-farcy, or suffer the same to run at large upon any common, road, or unclosed land, or use or tie the same in any public place, or off his own premises, or sell, trade, or offer for sale or trade any such animal, knowing the same to be so diseased, he shall be fined not less than fifty nor more than five hundred dollars, or be imprisoned not to exceed one year in the county jail, or both.

Slaughter of animals. SEC. 5014. If any horse, mule, or ass, reasonably supposed to be diseased with nasal gleet, glanders, or button-farcy, be found running at large without any known owner, it shall be lawful for the finder thereof to take such animals so found before some justice of the peace, who shall forthwith cause the same to be examined by some veterinary surgeon or other person skilled in such diseases, and if, on examination, it is ascertained to be so diseased, it shall be lawful for such justice of the peace to order such diseased animal to be immediately destroyed and buried; and the necessary expense accruing under the provisions of this section shall be defrayed out of the county treasury.

Carcass to be burned. SEC. 5015. The owner or person having charge of any swine, any of which die or are killed on account of any disease, shall, upon such fact coming to his knowledge, immediately burn the same.

Disposal of diseased animals. SEC. 5016. No person shall sell, or give away, or offer for sale any swine that have died of any disease or that have been killed on account of any disease.

Movement of diseased swine prohibited. SEC. 5017. No person shall convey upon or along any public highway or other public ground, or any private land except that owned or leased by him, any diseased swine or swine that have died of or have been killed on account of any disease. Upon the trial for the violations of the provisions of this section the proof that any person has hauled or is hauling dead swine from a neighborhood in which swine have been dying, or are at the time dying, from any disease shall be presumptive evidence of his guilt.

Escape unlawful. SEC. 5018. It shall be unlawful for any person negligently or wilfully to allow his hogs or those under his control, infested with any disease, to escape his control or run at large.

Penalty. SEC. 5019. Any person violating or failing to comply with any provision of the four preceding sections shall be fined not less than five nor more than one hundred dollars, or be imprisoned in the county jail not to exceed thirty days, or both.

Transportation; penalty. SEC. 5020. Any person driving any cattle into the State, or any agent, servant, or employee of any railroad or other corporation who shall carry, transport, or ship any cattle into this State, or any railroad company or other corporation or person who shall carry, ship, or deliver any cattle into this State, or the owner, controller, lessee, or agent or employee of any stock yard receiving into such stock yard, or in any other inclosure for the detention of cattle in transit or shipment or reshipment or sale, any cattle brought or shipped in any manner into this State which at the time they were either driven, brought, shipped, or transported into this State were in such condition as to infect with or to communicate to other cattle pleuro-pneumonia or splenic or Texas fever, shall be fined not less than three hundred and not more than one thousand dollars, or be imprisoned in the county jail not exceeding six months, or both.

Liabilities. SEC. 5021. Any person who shall be injured or damaged by any acts prohibited in the preceding section, in addition to the remedy therein provided, may recover the actual damages sustained by him from the person, agent, employee, or corporation therein mentioned, and neither said criminal proceedings nor said civil action shall be a bar to a conviction or to a recovery in the other.

Code of Laws.

KANSAS.

AN ACT to abolish the office of State veterinary surgeon and to amend sections 6803, 6804, 6814, 6818, 6819, and 6820 of the general statutes of 1889, and to repeal said original sections, and to repeal sections 6798, 6799, 6800, and 6801 of said general statutes.

Be it enacted by the Legislature of the State of Kansas :

Duty of commission. SECTION 1. That section 6803 of the general statutes of 1889 shall be amended so as to read as follows: Section 6803.

Duty of. It shall be the duty of the commission provided for in the first section of this act to protect the health of the domestic animals of the State from all contagious or infectious diseases of a malignant character, and for this purpose it is hereby authorized and empowered to establish, maintain, and enforce such quarantine, sanitary, and other regulations as it may deem necessary. It shall be the duty of any member of said commission upon receipt by him of reliable information of the existence among the domestic animals of the State of any malignant disease to go at once to the place where any such disease is alleged to exist and make a careful examination of the animals believed to be affected with any such disease and ascertain, if possible, what, if any, disease exists among the live stock reported to be affected, and whether the same is contagious or infectious or not; and if such disease is found to be of a malignant, contagious, or infectious character he shall direct the temporary quarantine and sanitary regulations necessary to prevent the spread of any such disease, and if in his judgment or in the judgment of the commission there is need of technical knowledge and examination on the subject he or they may call upon the veterinary surgeon of the agricultural college to visit the place where said disease is supposed to exist and take his opinion thereon.

Quarantine. SEC. 2. That section 6804 of the general statutes of 1889 shall be amended so as to read as follows: Section 6804. *Meeting: Establish quarantine.* If the member of the commission examining the place where such disease is supposed to exist shall be of the opinion that the exigencies of the case require, he shall immediately convene the commission at such place as he may designate and if, upon consideration of his report, the commission shall be satisfied that any contagious or infectious disease exist of a malignant character which seriously threatens the health of domestic animals they shall proceed at once to the infected district, ascertain and determine the premises or grounds infected and establish the quarantine, sanitary, and police regulations necessary to circumscribe and exterminate such disease, also to list and describe the domestic animals affected with such disease, and those which have been exposed thereto, and included within the infected district or premises so defined and quarantined, with such reasonable certainty as would lead to their identification; and for that purpose the said commission may, in its discretion, cause the live stock so included within the quarantine lines established to be marked or branded in such manner as the commissioners may designate; and no domestic animal liable to become infected with the disease, or capable of communicating the same, shall be permitted to enter or leave the district, premises, or grounds so quarantined, except by authority of the commissioners. The said commission shall also from time to time give and enforce directions, and prescribe such rules and regulations as to separating, mode of handling, treating, feeding, and caring for such diseased and exposed animals as it shall deem necessary to prevent the two classes of animals from coming in contact with each other and perfectly isolate them from all other domestic animals which have not been exposed thereto, and which are susceptible of becoming infected with the disease. And the said commission or any of the members thereof are hereby authorized and empowered to enter upon any grounds or premises to carry out the provisions of this act.

Penalty for possession. SEC. 3. That section 6814 of the general statutes of 1889 be amended so as to read as follows: Section 6814. *Examination.* Any person who owns, or is in possession of, live stock which is, or which is suspected or reported to be, affected with any infectious or contagious disease, who shall refuse to allow the authorized officer or officers to examine such stock, or shall hinder or obstruct the authorized officer or officers in any examination of, or in an attempt to examine such stock, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than one hundred dollars nor more than five hundred dollars.

Salary; expenses. SEC. 4. That section 6818 of the general statutes of 1889 be amended so as to read as follows: Section 6818. *Compensation.* The members of the commission, appointed by the governor as hereinbefore provided, shall receive five dollars per day for the time by them necessarily employed in the discharge of the duties required by this act, and each member of

the commission and the veterinary surgeon of the agricultural college hereinbefore provided for shall receive the actual necessary traveling expenses by them incurred and paid in the discharge of the duties required of them by the provisions of this act, which said per diem and expenses shall be drawn from the treasury on the warrants of the auditor, to be issued on the filing in his office of an itemized account thereof, properly verified.

Prohibit importations; quarantine. SEC. 5. That section 6819 of the general statutes of 1889 be amended so as to read as follows: Section 6819. *Declare quarantine.* Whenever the governor of the State shall have good reason to believe dangerous, contagious, or infectious disease has become epidemic in certain localities in other States, Territories, or countries, or that there are conditions which render such domestic animals from such infected districts liable to convey such disease, he shall, by proclamation, prohibit the importation of any live stock of the kind diseased into the State, unless accompanied by a certificate of health given by a duly authorized veterinary inspector, and all such animals arriving in this State shall be examined without delay by the live-stock commission or some member thereof, and, if deemed necessary, placed in close quarantine until all danger of infection is past, when they shall be released by the order of the live-stock commission.

Duty of owners of stock yards. SEC. 6. That section 6820 of the general statutes of 1889 be amended so as to read as follows: Section 6820. *Owners of stock yards.* That the owners of any stock yard doing business in this State, when requested by the live-stock sanitary commission, shall appoint and keep constantly in their employ at their expense a competent inspector of live stock, whose duty it shall be to daily inspect with care all animals brought into the stock yards in whose employ any such inspector may be, and upon the discovery by such inspector in such yards of any animal affected with any malignant, contagious, or infectious disease he shall direct the manner in which any such diseased animal shall be disposed of, so as to prevent the spread of such contagious or infectious disease, and for this purpose may cause any such diseased animal to be killed and the carcasses to be disposed of, at the expense of the owner thereof, in such manner as will prevent the spread of any such disease; but in no event shall any such diseased stock be permitted to be driven or shipped out of any such stock yards, except to some rendering establishment or other suitable place for killing and disposing of such diseased animal, as hereinbefore provided for, and then under such regulations and restrictions as may be necessary to prevent the spread of the disease on account of which any such animals have been condemned: *Provided*, That the owner of any animal or animals ordered to be destroyed by any inspector shall have the right to appeal from any decision of such inspector to the live-stock sanitary commission, and during the pendency of such appeal the condemned animals shall be kept in strict quarantine at the expense of the owner thereof: *And provided further*, That no compensation shall be made by the State to owners of diseased live stock found in public stock yards and destroyed, as herein provided. The inspector of live stock in any stock yards in this State shall, on demand of the owner of any live stock passing through any such stock yards, furnish to such owner a bill of health for any live stock by him inspected as hereinbefore required and found to be healthy.

Sections repealed. SEC. 7. That said original sections 6803, 6804, 6814, 6818, 6819, and 6820, and sections 6798, 6799, 6800, 6801, 6823, general statutes of 1889, are hereby repealed.

SEC. 8. That this act shall take effect and be in force from and after its publication in the official State paper.

Approved March 7, 1895.

LOUISIANA.

AN ACT constituting the police juries of the different parishes of the State live-stock sanitary commissions, with authority to enact and enforce ordinances and regulations for the suppression of glanders, farcy, and other contagious or infectious diseases afflicting live stock.

Be it enacted by the General Assembly of the State of Louisiana:

Duty of commission. SECTION 1. That the police juries of each and every parish in the State of Louisiana is hereby empowered to organize and act as a live-stock sanitary commission, with authority to enact and enforce ordinances and regulations for the suppression of glanders, farcy, and

other contagious and infectious diseases affecting live stock, as may seem needful and necessary; and it shall be the duty of said police juries acting as live-stock commissions, when in their judgment it is necessary, to employ a veterinary surgeon to cooperate with them in determining whether or not there exists contagious diseases among live stock of their respective parishes; and whenever in the opinion of said commission and veterinary surgeon the public safety demands the destruction of any animal or animals affected with an incurable contagious or infectious disease, then such killing shall be done under the order and direction of said commission and veterinary surgeon, and without compensation to the owner or owners of such animals.

Duty of owners; penalty. SEC. 2. *Be it further enacted, etc.,* That it shall be the duty of any person who discovers or suspects, or has reason to believe that any domestic animal belonging to him or in his charge, or that may come under his observation belonging to others, is affected with any contagious disease, without delay, report such fact or belief to the police member of his ward and to the president of the police jury; and any person or persons as above specified who shall neglect or refuse to notify the proper authorities as above specified and designated of the existence of any contagious or deadly disease that may have been brought to his knowledge shall be guilty of a misdemeanor and upon conviction thereof shall be fined in a sum not less than ten nor more than one hundred dollars, or be imprisoned and worked on the public roads not less than ten nor more than ninety days, or both, at the discretion of the court.

Penalty for hindrance. SEC. 3. *Be it further enacted, etc.,* That any person who willfully hinders, obstructs, or otherwise disregards or evades such sanitary regulations as provided for in this act, or violates any of the rules and regulations that may be enacted in any of the parishes as herein authorized for the restriction and stamping out of any disease among live stock as aforementioned, or who shall resist the orders of the parish live-stock commission or an officer acting under authority of same in the discharge of their duty shall be guilty of a misdemeanor and upon conviction shall be punished in the same manner as provided in the preceding section.

Penalty for importation. SEC. 4. *Be it further enacted, etc.,* That any person who knowingly shall bring into any parish of the State of Louisiana any animal affected with any contagious disease such as glanders, farcy, or any animal which has been exposed to any such disease, shall be guilty of a misdemeanor, and on conviction of same shall be fined in a sum not less than one hundred nor more than five hundred dollars, with the addition of all damage that may have occurred in consequence of such importation.

SEC. 5. *Be it further enacted, etc.,* That this act be enforced from and after its passage and that all laws in conflict herewith are repealed.

Approved July 12, 1894.

MAINE.

AN ACT to prevent the use of diseased meat for food purposes.

Duty of commission. SECTION 1. It shall be the duty of the cattle commissioners and of all other persons having in charge the killing of any diseased cattle, sheep, or any other diseased domestic animals, as soon as such animal is killed, to inject or cause to be injected into the carotid artery of each animal so killed kerosene oil in sufficient quantity to thoroughly penetrate and permeate the entire fleshy part of the carcass of each such animal killed as aforesaid.

Disposition of carcass. SEC. 2. Every carcass treated as provided in section one of this act shall, within twenty-four hours thereafter, be buried to a depth of at least four feet, or within forty-eight hours thereafter be reduced by the process of manufacturing the same for fertilizers.

Penalty. SEC. 3. Any person violating any of the provisions of this act shall be fined not exceeding one hundred dollars for each offense or imprisoned for a period not exceeding ninety days, or both.

Approved March 26, 1897.

MARYLAND.

AN ACT to amend article fifty-eight of the Code of Public General Laws, title "Live stock," by the addition thereto of another section, to follow section eighteen of said article, and to be numbered section nineteen.

Be it enacted by the General Assembly of Maryland:

SECTION 1. That article fifty-eight of the Code of Public General Laws, title "Live stock," be amended by the addition thereto of a new section, to follow section eighteen of said article, and to be numbered section nineteen, and read as follows:

Disposition of infected carcass. 19. That all hogs and other domestic animals dying of any contagious or infectious disease shall be buried at the depth of at least three feet, or be burned at the discretion of the owner, and any person or persons permitting any dead hogs or any other domestic animals having died of any contagious or infectious disease to remain unburied upon his or their premises for the space of three hours prior to sunset of said day after he has discovered the same, shall be guilty of a misdemeanor, and **Penalty.** upon conviction thereof before any justice of the peace shall be fined not less than ten dollars for each offense, or imprisoned in the county jail for not less than ten days, or be both fined and imprisoned in the discretion of the justice.

SEC. 2. *And be it enacted,* That this act shall take effect from the date of its passage.

Approved April 3, 1890.

MASSACHUSETTS.

AN ACT to restrict the use of tuberculin.

Be it enacted, etc., as follows:

Section amended. Section fourteen of chapter four hundred and ninety-six of the acts of the year eighteen hundred and ninety-five is hereby amended by striking out, in the first and second lines, the words "eighteen hundred and ninety-six," and inserting in place thereof the words "eighteen hundred and ninety-seven," so that the section, as amended, will read as follows:

Tuberculin restricted. SECTION 14. Until June first, eighteen hundred and ninety-seven, the use of tuberculin as a diagnostic agent for the detection of the disease known as tuberculosis in domestic animals shall be restricted to cattle brought into the Commonwealth from any point without its limits, and to all cattle held in quarantine at Brighton, Watertown, and Somerville: *Provided, however,* That tuberculin may be used as such diagnostic agent on any animal or animals in any other portion of the State upon the consent in writing of the owner or person in possession thereof, and upon any animals condemned as tuberculous upon physical examination by a competent veterinarian.

Approved April 13, 1896.

AN ACT to restrict the use of tuberculin.

Be it enacted, etc., as follows:

Section amended. Section fourteen of chapter four hundred and ninety-six of the acts of the year eighteen hundred and ninety-five, as amended by chapter two hundred and seventy-six of the acts of the year eighteen hundred and ninety-six, is hereby amended by striking out, in the first and second lines, the words "until June first, eighteen hundred and ninety-seven," and by striking out, in the sixth and seventh lines, the words "held in quarantine," so as to read as follows:

Tuberculin restricted. SECTION 14. The use of tuberculin as a diagnostic agent for the detection of the disease known as tuberculosis in domestic animals shall be restricted to cattle brought into the Commonwealth from any point without its limits, and to all cattle at Brighton, Watertown, and Somerville: *Provided, however,* That tuberculin may be used as such diagnostic agent on any animal or animals in any other portion of the State upon the consent in writing of the owner or person in possession thereof, and upon any animals condemned as tuberculous upon physical examination by a competent veterinarian.

Approved March 17, 1897.

AN ACT relative to animals affected with infectious diseases.

Be it enacted, etc., as follows:

Owner or agent to report disease. SECTION 1. Any owner, agent, or other person in charge of or called to examine any animal in the city of Boston affected with either of the diseases known as glanders, farcy, or rabies, shall forthwith report to the board of health of said city the name of the owner and place of keeping of such animal.

Diseased animals to be killed. SEC. 2. Said board, when satisfied upon examination that any animal within said city is affected by either of said diseases, shall cause such animal to be forthwith killed or otherwise disposed of.

Penalty. SEC. 3. Any person violating any provisions of this act shall, for each offense, be punished by a fine not exceeding one hundred dollars or by imprisonment in the House of correction not exceeding one year.

Approved March 19, 1897.

AN ACT in addition to an act making an appropriation for expenses in connection with the extermination of contagious diseases among horses, cattle, and other animals.

Be it enacted, etc., as follows:

Appropriation to exterminate contagious diseases. SECTION 1. The sum of two hundred thousand dollars is hereby appropriated, to be paid out of the treasury of the Commonwealth from the ordinary revenue, for the purpose of meeting expenses in connection with the extermination of contagious diseases among horses, cattle, and other animals during the year ending on the thirty-first day of December, in the year eighteen hundred and ninety-six, the same to be in addition to the amount appropriated by chapter thirty-nine of the acts of the present year.

Application of fund. SEC. 2. The sum hereby appropriated shall be first applied to the payment for neat cattle now held in quarantine and condemned as tuberculous by the board of cattle commissioners or any member thereof, to the payment of all quarantine and other expenses incident thereto by law required to be paid by the Commonwealth, and to the payment of all other expenses already legally incurred by said board. No part of the sum hereby appropriated shall be applied in payment for the testing of or compensation for cattle condemned and killed under tests made at the owner's request. If the sum hereby appropriated shall be expended before the first day of January, in the year eighteen hundred and ninety-seven, the auditor shall immediately certify that fact to the board of cattle commissioners. Upon the receipt of such certification said board shall immediately notify each city and town and each inspector throughout the Commonwealth that said appropriation is exhausted, and thereafter no Massachusetts cattle shall be quarantined until a further appropriation is made, and all Massachusetts cattle quarantined at the time such notification is issued shall be immediately released.

SEC. 3. This act shall take effect upon its passage.

Approved June 2, 1896.

MICHIGAN.

PROTECTION AGAINST TEXAS CATTLE.

Restriiction of cattle. SECTION 2136f. Section 1. *The people of the State of Michigan enact,* That it shall not be lawful to transport any neat cattle into or across this State, yard or feed the same, that have been reared or kept south of the thirty sixth parallel of north latitude, and that have not subsequently been kept continuously at least one winter north of said parallel, and which may be brought within the limits of this State between the first day of April and the first day of November following, except in the manner hereafter provided.

Duty of railroads. SEC. 2136g. Section 2. It shall be the duty of all railroad companies doing business in this State to receive and transport, while in this State, the class of cattle mentioned in section one only in cars that are branded or lettered legibly and distinctly and in plain view the words, "For the transportation of Texas cattle only;" and they shall not permit or allow any other class of cattle to enter those cars between the first day of April and the first day of November following: *Provided,* That cattle coming from other States

for transportation through this State, when it is impossible to ascertain where they came from, may be shipped in such cars, but shall be treated in all respects as coming from the country south of the thirty-sixth parallel of north latitude.

Duties of stock-yard companies. SEC. 2136 h. Section 3. It shall be the duty of any railroad company, stock-yard company, or private individual owning and operating any stock yard in this State, to receive and feed the class of cattle mentioned in section one only in yards separate and apart from yards used for the feeding or yarding of other cattle; and these yards shall be in the immediate vicinity and contiguous to a railroad side track, so that these cattle may not pass over any open common that might be crossed by other cattle; and said yards shall have a sign posted at each entrance thereto, on which shall be plainly lettered, "For the yarding of Texas cattle only," and no other cattle shall be admitted to these yards between the first day of April and the first day of November of each year.

Penalty. SEC. 2136 i. Section 4. Any railroad company, stock-yard company, or private individual owning any stock yard in this State, who shall violate any of the provisions of sections one and two of this act, shall forfeit and pay to the people of the State of Michigan not less than fifty dollars nor more than five hundred dollars for each and every such offense, and shall be liable for any and all damages caused to any neat cattle by their failure to comply with the requirements of this act.

Penalty for shipment. SEC. 2136 j. Section 5. Any person or person [persons] who shall knowingly or wilfully place or attempt to place any neat cattle or others than those mentioned in section one in any car or yard provided for in section two or three of this act, and branded and lettered as therein provided for, between the first day of April and the first day of November following, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than ten dollars nor more than one hundred dollars, or be imprisoned not less than ten days nor more than sixty days, or both such fine and imprisonment, in the discretion of the court.

STATE LIVE STOCK SANITARY COMMISSION.

Commission. SEC. 2136 k. Section 1. *The people of the State of Michigan enact,* That a commission is hereby established, which shall be known under the name and style of "The State Live Stock Sanitary Commission." The commission shall consist of three commissioners who are practical agriculturists and engaged in the live-stock industries of the State, who shall be appointed by the governor with the advice and consent of the senate. One shall be appointed for the term of six years, one for the term of four years, and one for the term of two years, whose term of office shall commence on the second Tuesday of July of the year in which they are appointed, and shall continue until their successors are appointed and qualified. At each succeeding biennial session of the legislature there shall be appointed in like manner one commissioner who shall hold his office six years or until his successor is appointed and qualified. The governor shall also appoint with the advice and consent of the senate a competent and skilled **Appointment of veterinary surgeon.** veterinary surgeon for the State who, at the time of such appointment, shall be a graduate in good standing of a recognized college of veterinary surgery, and who shall hold his office two years from the second Tuesday of July of the year he is appointed, and until his successor is appointed and qualified. The governor shall also appoint every two years thereafter a competent and skilled veterinarian having the qualifications above mentioned, whose term of office shall be for two years or until his successor is appointed and qualified.

Oath of office. SEC. 2136 l. Section 2. Said commissioners and veterinary surgeon before they enter upon the duties of their office shall each take and subscribe the constitutional oath of office and file the same with the secretary of state.

Salary and expenses. SEC. 2136 m. Section 3. Each commissioner shall receive the sum of three dollars per day and necessary expenses for the time actually spent in the discharge of his duties; and the veterinary surgeon shall receive the sum of five dollars per day and necessary expenses for time when employed.

Duty of commission. SEC. 2136 n. Section 4. It shall be the duty of the commission to protect the health of the domestic animals of the State from all contagious or infectious diseases of a malignant character, and

for this purpose it is hereby authorized and empowered to establish, maintain, and enforce such quarantine, sanitary and other regulations as it may deem necessary.

Duty of individuals. SEC. 2136o. Section 5. It shall be the duty of any person who discovers, suspects, or has reason to believe that any domestic animal belonging to him or in his charge, or that may come under his observation, belonging to other parties, is affected with any disease, whether it be a contagious or infectious disease, to immediately report such fact, belief, or suspicion to the live stock sanitary commission, or a member thereof, or to the local board of health or some member thereof.

Duty of board of health. SEC. 2136p. Section 6. It is hereby made the duty of all local boards of health, to whom cases of contagious or infectious diseases are reported, to immediately investigate the same, either in person by some member or members of the board, or by the employment of a competent and skilled veterinarian; and should such investigation show a reasonable probability that a domestic animal is affected with a contagious or infectious disease of a malignant character, the local board of health shall immediately establish such temporary quarantine as may be necessary to prevent the spread of the disease, and report all action taken to the commission or to some member thereof; and the acts of local boards of health establishing temporary quarantine shall have the same force and effect as though established by the commission itself, until such time as the commission may take charge of the case or cases, and relieve the local board of health. All expenses incurred by local boards of health in carrying out the provisions of this act shall be paid in like manner as are other expenses incurred by said boards in the discharge of other official duties.

Quarantine. SEC. 2136q. Section 7. The commission or any member thereof to whom the existence of any infectious or contagious disease of domestic animals is reported shall forthwith proceed to the place where such domestic animal or animals are and examine the same, and if in his or their opinion any infectious or contagious disease does exist he or they shall prescribe such temporary quarantine and regulations as will prevent the spread of the contagion or infection, and notify the State veterinarian, who shall forthwith proceed to the place where said contagious or infectious disease is said to exist, and examine said animal or animals and report his or their finding to the said commission, who shall then prescribe such rules and regulations as in their judgment the exigencies of the case may require for the effectual suppression and eradication of the disease; and for that purpose the said commission may list and describe the domestic animals affected with such disease and those which have been exposed thereto and included within the infected district or premises so defined and quarantined with such reasonable certainty as would lead to their identification, and no domestic animal liable to become infected with the disease or capable of communicating the same shall be permitted to enter or leave the district, premises, or grounds so quarantined, except by the authority of the commission. The said commission shall also, from time to time, give and enforce such directions, and prescribe such rules and regulations as to separating, mode of handling, treating, feeding, and caring for such diseased and exposed animals as it shall deem necessary to prevent the two classes of animals from coming in contact with each other, and perfectly isolate them from all other domestic animals which have not been exposed thereto and which are susceptible of becoming infected with the disease; and the said commission and veterinarian are hereby authorized and empowered to enter upon any grounds or premises to carry out the provisions of this act. When in the opinion of the commission it shall be necessary to prevent the further spread of any contagious or infectious disease among the live stock of the State, to destroy animals affected with or which have been exposed to any such disease, it shall determine what animals shall be killed, and appraise the same, as hereinafter provided, and cause the same to be killed and the carcasses disposed of as in their judgment will best protect the health of domestic animals of the locality.

Proclamation. SEC. 2136r. Section 8. When the commission shall have determined the quarantine and other regulations necessary to prevent the spread among domestic animals of any malignant, contagious, or infectious diseases found to exist among the live stock of the State, and given their order as hereinbefore provided, prescribing quarantine and other regulations, it shall notify the governor thereof, who shall issue his proclamation proclaiming the boundary of such quarantine and the orders, rules, and regulations prescribed by the commission, which proclamation may be published by written or printed handbills, posted within the boundaries or on the lines of the district, premises, places, or grounds quarantined: *Provided*, That if the commission decide that it

is not necessary, by reason of the limited extent of the district in which such disease exists, that a proclamation should be issued, then none shall be issued; but such commission shall give such notice as may to it seem best to make the quarantine established by it effective.

Slaughter of animals; appraisalment. SEC. 2136a. Section 9. Whenever the commission shall direct the killing of any domestic animal or animals it shall be the duty of the commissioners to appraise the animal or animals condemned, and in fixing the value thereof the commissioners shall be governed by the value of said animal or animals at the date of appraisalment.

Certificate of animals slaughtered. SEC. 2136f. Section 10. Whenever any live stock shall be appraised and killed by order of the commission, it shall issue to the owner of the stock so killed a certificate showing the number and kind of animals killed, and the amount in their judgment to which the owner is entitled, and report the same to the governor of the State, which certificate, if approved by the governor, shall be presented to the auditor-general, who shall draw his warrant on the State treasurer for the amount therein stated, payable out of any money in the treasury not otherwise appropriated.

Conditions for slaughter. SEC. 2136u. Section 11. When any animal or animals are killed under the provisions of this act, by order of the commission, the owner thereof shall be paid therefor the appraised value as fixed by the appraisalment hereinbefore provided for: *Provided*, The right of indemnity on account of animals killed by order of the commission under the provisions of this act shall not extend to the owners of animals which have been brought into the State in a diseased condition, or from a State, country, territory, or district in which the disease with which the animal is affected, or to which it has been exposed, exists. Nor shall any animal be paid for by the State which may be brought into the State in violation of any law or quarantine regulation thereof, or the owner of which shall have violated any of the provisions of this act, or disregarded any rule, regulation, or order of the live stock sanitary commission or any member thereof. Nor shall any animal be paid for by the State which came into the possession of the claimant with the claimant's knowledge that such animal was diseased, or was suspected of being diseased, or of having been exposed to any contagious or infectious disease.

Penalty. SEC. 2136v. Section 12. Any person who shall have in his possession any domestic animal affected with any contagious or infectious disease, knowing such animal to be so affected, or, after having received notice that such animal is so affected, who shall permit such animal to run at large, or who shall keep such animal where other domestic animals not affected by or previously exposed to such disease may be exposed to its contagion or infection, or who shall sell, ship, drive, trade, or give away such diseased animal or animals which have been exposed to such contagion or infection, or who shall move or drive any domestic animal in violation of any direction, rule, or regulation, or order establishing and regulating quarantine, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than ten dollars nor more than one hundred dollars, or be imprisoned in the county jail not less than ten nor more than ninety days, or both such fine and imprisonment, in the discretion of the court, for each of such diseased or exposed domestic animals which he shall permit to run at large or keep, sell, ship, drive, trade, or give away in violation of the provisions of this act.

Unlawful introduction; penalty. SEC. 2136w. Section 13. Any person who shall knowingly bring into this State any domestic animal which is affected with any contagious or infectious disease, or any animal which has been exposed to any contagious or infectious disease, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined in any sum not less than one hundred dollars nor more than five thousand dollars, or be imprisoned in the State prison not to exceed one year, or both such fine and imprisonment, in the discretion of the court.

Penalty for hindrance. SEC. 2136x. Section 14. Any person who owns or is in possession of live stock which is affected, or which is suspected or reported to be affected, with any infectious or contagious disease, who shall willfully prevent or refuse to allow the State veterinarian or commissioner or other authorized officer or officers to examine such stock, or shall hinder or obstruct the State veterinarian or other authorized officer or officers in any exami-

nation of or in an attempt to examine such stock, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than ten dollars nor more than one hundred dollars, or be imprisoned in the county jail not less than ten nor more than ninety days, or both such fine and imprisonment, in the discretion of the court.

Penalties. SEC. 2136y. Section 15. Any person who shall willfully violate, disregard, or evade, or attempt to violate, disregard, or evade any of the provisions of this act, or who shall willfully violate, disregard, or evade any of the rules, regulations, orders, or directions of the live stock sanitary commission establishing and governing quarantine, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than ten dollars nor more than one hundred dollars, or be imprisoned in the county jail not less than ten nor more than ninety days, or both such fine and imprisonment, in the discretion of the court.

Power of the commission. SEC. 2136z. Section 16. The commission provided for in this act shall have power to employ, at the expense of the State, such persons and purchase such supplies and material as may be necessary to carry into full effect all orders by it given.

Power of commission. SEC. 2136z1. Section 17. The commissioners shall have power to call upon any sheriff, under sheriff, deputy sheriff, or constable to execute their orders, and such officers shall obey the orders of said commissioners, and the officers performing such duties shall receive compensation therefor as is prescribed by law for like services and shall be paid therefor in like manner. And any officer may arrest and take before any justice of the peace of the county any person found violating any of the provisions of this act, and such officer shall immediately notify the prosecuting attorney of such arrest, and he shall prosecute the person so offending according to law.

Proclamation of quarantine. SEC. 2136z2. Section 18. Whenever the governor of the State shall have good reason to believe that any dangerous, contagious, or infectious disease has become epizootic in certain localities in other States, Territories, or countries, or that there are conditions which render such domestic animals from such infected districts liable to convey such disease, he shall by proclamation prohibit the importation of live stock of the kind diseased into the State, unless accompanied by a certificate of health given by a duly authorized veterinary surgeon; and all such animals arriving in this State shall be examined immediately by the commission or some member thereof, and if he or they deem necessary he or they shall have said animals inspected by the State veterinary surgeon, and if in his opinion there is any danger from contagion or infection they shall be placed in close quarantine until such danger of infection or contagion is passed, when they shall be released by order of said commission or some member thereof.

Power of commission. SEC. 2136z3. Section 19. For the purposes of this act, each member of the live-stock sanitary commission is hereby authorized and empowered to administer oaths and affirmations.

Authority for suppression of diseases. SEC. 2136z4. Section 20. This commission is hereby authorized and required to cooperate with any board or commission acting under any present or future act of Congress for the suppression and prevention of contagious or infectious diseases among domestic animals, and the same right of entry, inspection, and condemnation of diseased animals upon private premises is granted to the United States board or commission as is granted to the commission granted under this act.

Report. SEC. 2136z5. Section 21. The commission shall make biennially a detailed report of its doings to the governor, which report shall be transmitted to the legislature at its regular biennial session.

Construction of act. SEC. 2136z6. Section 22. This act shall be construed so as to include sheep and horses.

Corporations; penalty. SEC. 2136z7. Section 23. Any railroad company, navigation company, or other corporation or common carrier who shall knowingly or willfully violate, disregard, or evade any of the provisions of this act, or who shall willfully violate, disregard, or evade any of the rules, regulations, orders, or directions of the live-stock sanitary commission

establishing or governing quarantine, or who shall evade or attempt to evade any quarantine proclamation of the governor of this State declaring quarantine limits, shall forfeit and pay to the people of the State of Michigan not less than five hundred dollars nor more than five thousand dollars for each and every offense, and shall be liable for all damages caused to any neat cattle by its or his failure to comply with the requirements of this act.

General Statutes 1883 to 1896.

MINNESOTA.

AN ACT relating to the inspection of milk and of dairies and of dairy herds and to provide for the licensing and regulation of the sale of milk in cities.

Be it enacted by the Legislature of the State of Minnesota:

Ordinances relating to inspection. SECTION 1. The city council of any city may by ordinance provide for the inspection of milk and of dairies and of dairy herds kept for the production of milk within its limits, and issue licenses, for which no fee shall be charged, for the sale of milk within its limits and regulate the same; and may authorize and empower the board of health to enforce all laws and ordinances relating to the production and sale of milk and the inspection of dairies and dairy herds producing milk for sale or consumption within such city, to appoint such inspectors, experts, and chemists as are necessary for the proper enforcement of such laws and ordinances, their compensation to be fixed by the city council, and such inspectors, experts, and chemists shall be possessed of such necessary powers within the limits of such city as shall be prescribed by ordinance, but no such ordinance shall conflict with any law of this State.

Not to conflict. SEC. 2. Nothing in this act contained shall affect or interfere with any of the powers and duties conferred upon the State dairy and food commissioner or his deputies and agents by any law of this State.

SEC. 3. This act shall take effect and be in force from and after its passage.

Approved April 26, 1895.

AN ACT to prevent the spread of contagious and infectious diseases among domestic animals in this State.

Be it enacted by the Legislature of the State of Minnesota:

Board of health to have control; powers. SECTION 1. Authority is hereby given to the State board of health and to the several local boards of health of the towns, villages, and cities of this State, to take all steps they may severally deem necessary to control, suppress, and eradicate any and all contagious and infectious diseases among any of the domestic animals in this State, and to that end said boards are hereby severally empowered, within their respective jurisdictions, to quarantine any domestic animal which is infected with any such disease or which has been exposed to infection therefrom; to kill any animal so infected, and, whenever deemed necessary by the State board of health, to kill any animal which has been exposed to the infection of any such disease; to regulate or prohibit the arrival in or departure from this State, and the towns, villages, and cities thereof, of any such exposed or infected animal, and at the cost of the owner thereof to detain any domestic animal found in violation of any such regulation or prohibition; to adopt all such rules and regulations as may be by such several boards deemed necessary or expedient to enforce the authority hereby given; and said State board of health is hereby expressly given authority to regulate or prohibit the shipment into this State of any domestic animal which, in the judgment of said board, may endanger the public health.

Contagious or infectious diseases shall be reported. SEC. 2. Any person who knows of, or has reason to suspect, the existence of any contagious or infectious disease in any domestic animal shall forthwith give notice thereof to the local board of health of the town, village, or city where such animal is kept. Within twenty-four hours after any local board of health shall receive notice that any domestic animal is infected with any such disease, or has been exposed thereto, it shall give notice thereof in writing to the State board of health.

Rules recorded and in force. SEC. 3. All rules and regulations adopted by any board of health under the authority of this act shall be entered upon the minutes of said board and shall be published in the manner therein provided. All regulations now in force adopted by any board of health within this State, under authority of any law existing prior to the passage hereof, relating to the matters covered by this act and not in conflict with this law, are continued in force, and are hereby declared to be the rules and regulations of such several boards under this act until such times as others are adopted.

When animals may be killed; tuberculin tests. SEC. 4. No animal shall be killed by any of the boards herein mentioned until it shall first have been adjudged to be infected with a contagious

or infectious disease, either by a duly authorized agent of the State board of health, or by a physician or veterinary surgeon selected by a local board of health; except that whenever in the judgment of the State board of health the control or eradication of a disease renders it advisable to do so, such board may order killed and buried, or otherwise destroyed, any domestic animal which has been exposed to a contagious or infectious disease, although at the time not infected therewith.

Provided, however, That cattle in this State shall not be adjudged infected with the disease of tuberculosis or condemned as being so infected except and until such animal has been subjected to at least two separate tuberculin tests to ascertain the presence of such disease, and the time of making such separate tests shall not be nearer together than two months and not farther apart than three months. In all cases to ascertain the presence of such disease the tests aforesaid shall be made by a duly licensed veterinary surgeon under authority of said board of health. And no milk or other products from such animals shall be sold or offered for sale.

Owner to be notified of infected animal; compensation for animals killed.

SEC. 5. Whenever a domestic animal has been adjudged [adjudged] to be infected with a contagious or infectious disease and has been ordered killed by

the State board of health or by a local board of health, the owner or keeper of such animal shall be notified thereof, and within twenty-four (24) hours thereafter he may file a protest with the board of health which has ordered such animal killed against the killing thereof, and shall therein state under oath that to the best of his belief such animal is not infected with any contagious or infectious disease; whereupon, said animal being killed notwithstanding such protest, a post-mortem examination thereof shall be made by experts, appointed, one by the board of health, one by the owner, and one by the two already appointed, and if upon such examination said animal shall be found to have been entirely free from contagious or infectious disease, there shall be appointed three competent and disinterested men—one by the board of health, one by the owner of the animal killed, and the third by the two already appointed—to appraise it at its cash value immediately before it was killed, and the amount of such appraisal shall be paid to the owner of such animal, one-fifth part thereof by the town, village, or city where the animal was kept and four-fifths thereof by the State. All appraisements made under this act shall be in writing and signed by the appraisers and certified to by the local board of health and the State board of health, respectively, to the governor of the State and to the treasurer of the several towns, villages, and cities wherein the animals appraised were kept. Whenever any such animal which has not been adjudged to be infected is killed by order of said board, but not by the owner or keeper thereof, a post-mortem examination thereof shall be made by experts appointed as aforesaid, and if found to have been entirely free from any infectious disease the value of such animal shall be determined and paid for as hereinbefore specified, except, as in this section expressly provided, no compensation shall be paid for any animal killed by virtue of any authority given by this act.

Expense of killing and burying. SEC. 6. The expense of the killing and burial, or destruction, of any diseased animal ordered killed by either of the boards aforesaid shall be borne by the town, village, or city where such animal was kept. The expense of the quarantine of any infected animal, or of any animal that has been exposed to infection, shall be paid when taken from the possession of its owner or keeper, shall be borne, one-fifth by the town, village, or city where the animal was kept, and four-fifths by the State. When any animal is quarantined upon the premises of its owner or keeper, the expense thereof shall be borne by such owner or keeper. Whenever any animal is quarantined when being shipped into the State, the expense thereof shall be borne by its owner or keeper. Whenever the owner or keeper of any domestic animal is liable for any expenses incurred under this act, by any board of health

in connection therewith, such board may have a lien on such animal for such expense, and may also maintain an action against such owner or keeper therefor.

Enforcement of orders. SEC. 7. It is hereby made the duty of the several local boards of health in this State to carry out and enforce all orders and directions of the State board of health to them directed, and the State board of health may require any two or more local boards to act together for the purpose of enforcing any of the provisions of this act.

Whenever the rules and regulations of the State board of health made under authority of this act conflict with the rules and regulations made hereunder by any local board of health, those made by the State board shall supersede those made by the local board.

Examination of witnesses. SEC. 8. The State board of health, or any duly authorized agent thereof, may examine, or cause to be examined, under oath, all persons believed to possess knowledge of material facts concerning the existence or dissemination, or danger of dissemination, of disease among domestic animals; and, for this purpose, shall have all the powers vested in justices of the peace to take depositions and to compel witnesses to attend and testify.

Penalties. SEC. 9. Any person violating any provisions of this act, or any rule or regulation made by the State board of health or by any local board of health, or any order made by any such board under the authority hereof, shall be guilty of a misdemeanor and be punished by a fine of not less than twenty-five or more than one hundred dollars, or by imprisonment for not less than thirty or more than ninety days. Any member of any local board of health who shall neglect or refuse to carry into effect the provisions of this act, or who shall neglect or refuse to carry out any direction of the State board of health, or who shall neglect or refuse to enforce any rule or regulation made by the State board of health, or by any local board of health, under the authority hereof, shall be guilty of a misdemeanor and be punished by a fine of not less than twenty-five and not more than one hundred dollars; and each and every day's neglect or refusal to perform any duty imposed upon him by this act shall constitute a separate and independent misdemeanor. Complaints for violating the provisions of this act, or for violating any rule or regulation made by any board of health under its authority, may be made by any member or authorized agent of any such board or by any citizen of this State.

Penalty for trespassing. SEC. 10. Whenever, during the prevalence in the State of any contagious or infectious disease among domestic animals, the owner shall post on his premises a notice forbidding all persons to enter any building or enclosure on said premises without permission from said owner, it shall be a misdemeanor to enter upon said premises, punishable by a fine of not less than twenty-five nor more than one hundred dollars, or by imprisonment for not less than thirty nor more than ninety days.

Penalty for trespassing which is not authorized. SEC. 11. Whenever during the prevalence in the State of any contagious or infectious diseases among domestic animals the owner shall post on his premises a notice forbidding all persons not authorized by State or local boards of health to enter any building or enclosure on said premises without permission from said owner, it shall be a misdemeanor to enter upon said premises, punishable by a fine of not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment for not less than thirty nor more than ninety days.

Appropriation for expenses. SEC. 12. The sum of six thousand dollars, or so much thereof as necessary, is hereby annually appropriated for the payment of the expenses that may be incurred by the State in enforcing this act, such expenses to be approved by the State board of health and by the governor.

Repealing clause. SEC. 13. Chapter two hundred of the general laws of the State of Minnesota for eighteen hundred and eighty-five, as well as all other acts and parts of acts inconsistent with this act, are hereby repealed, except as to any actions now pending growing out of the enforcement of the same.

SEC. 14. This act shall take effect and be in force from and after its passage.

Approved April 23, 1897.

MISSISSIPPI.

AN ACT to amend section 1019 of the annotated code, so as to provide for the employment of a veterinary surgeon in case of glanders or farcy.

Be it enacted by the Legislature of the State of Mississippi:

Disposition of infected animals; penalties. SECTION 1. That section 1019 of the annotated code be amended to read as follows, to wit, 1019 (810): The same; glandered animals, etc.

If any person being the owner or having the charge of any animal diseased with the glanders or farcy shall not deprive the animal of life or closely confine it remote from all other animals liable to contract the disease, he shall be guilty of a misdemeanor; and whenever a case of glanders or farcy is reported to the president of the board of supervisors, he may employ a competent veterinary surgeon if necessary, at the expense of the county. If such veterinary surgeon declare the animal or animals affected with glanders or farcy the sheriff shall immediately kill such animal, for which service he shall be allowed not more than two dollars for each animal destroyed. If any owner of stock having good reason to suspect that his stock is so diseased shall fail to report to the president of the board, or if any official named in this section shall fail to perform the duties herein imposed, such offender shall, on conviction, be fined not less than \$25 nor more than \$200, or imprisonment in the county jail not exceeding four months, or both.

Quarantined. SEC. 2. The board of supervisors, when any animal shall have been exposed to glanders and not actually affected, may order all such animals to be quarantined until such time as the danger of contagion shall have passed, and the place where such animals are kept shall also be quarantined.

SEC. 3. That this act shall take effect and be in force from and after its passage.

Approved March 18, 1896.

MISSOURI.

AN ACT to amend sections 4, 6, 8, and 12 of an act entitled "An act to amend article 3, chapter 167, sections 8775, 8776, 8777, 8778, 8779, 8781, 8782, 8783, 8790, 8791, 8793, and 8794 of the Revised Statutes of the State of Missouri of 1889," approved March 27, 1891, relating to "Agriculture, State board of veterinary service"

Be it enacted by the General Assembly of the State of Missouri, as follows:

Veterinary surgeon to inspect diseases transmissible to human family. SECTION 1. That section 4 of an act entitled "An act to amend article 3, chapter 167, sections 8775, 8776, 8777, 8778, 8779, 8781, 8782, 8783, 8791, 8793, and 8794 of the Revised Statutes of the State of Missouri of 1889," approved March 27, 1891, be, and the same is hereby, amended by inserting after the word "year," in the last line of said section, the following words, to wit, "The State board of health may demand of the secretary of the State board of agriculture, through their president and secretary, the services of the State veterinary surgeon to aid them in the inspection of such infectious or contagious diseases as are transmissible to the human family, and in examination of meats, milk, and food, when in the judgment of said State board of health the assistance of this officer is necessary;" so that said section when amended shall read as follows:

Veterinary surgeon, how secured. SECTION 4. (Section 8778.) It shall be lawful for any ten freeholders, residents of this State, to go before any clerk of a court of record or justice of the peace and demand the presence and services of said veterinary surgeon in the following manner:

STATE OF MISSOURI, County of ———:

To the secretary of the State board of agriculture, Columbia, Mo.:

We, the undersigned citizens, freeholders of the county of ———, believe that there exists in this locality a dangerous, infectious disease among (here name the kind of stock, the name in full of the party owning the same or in charge thereof, the part of the county in which it is situated, together with the nearest railroad station and post-office address, and full directions as to the best and most expeditious way for the veterinary surgeon to reach said stock), therefore we request the presence of the State veterinary surgeon.

_____. [SEAL.]
_____. [SEAL.]

Which petition may be certified to in the following manner:

STATE OF MISSOURI, County of ———:

I hereby certify that the above-named petitioners are known to me to be reputable citizens of this county.

(Signed by the clerk of said court or justice of the peace, and attested by his official signature, giving day of the month and the year.)

The State board of health may demand of the secretary of the State board of agriculture, through their president and secretary, the services of the State veterinary surgeon to aid them in the inspection of such infectious or contagious diseases as are transmissible to the human family, and in examination of meats, milk, and foods, when in the judgment of said State board of health the assistance of this officer is necessary.

SEC. 2. That section 6 of the act, as set forth in section 1 of this act, be, and the same is hereby, repealed and a new section inserted in lieu thereof, which shall read as follows:

Quarantine. SECTION 6. (Section 8781.) If, upon investigation, said veterinary surgeon shall be satisfied that such live stock is suffering from, or infected, or capable of infecting with or causing, what is known as glanders, farcy, tuberculosis, contagious pleuro-pneumonia, Texas fever, rinderpest, foot or mouth disease, or any other dangerous disease of a contagious, infectious, or spreading character, against which he may think best to quarantine, he shall immediately quarantine the same by placing it in pens, barns or sheds, completely separated from other susceptible stock not so diseased or infected, until such diseased stock shall be disinfected or completely recovered, and its release ordered by the State veterinary surgeon or his deputies, or shall have been killed or disposed of as hereinafter provided; and all barns, sheds, or pens containing the diseased stock shall be surrounded with a good and sufficient fence to prevent any other stock from approaching nearer than one hundred feet to the barn or pen containing such diseased stock, unless the said veterinary surgeon is satisfied that it is impractical to quarantine as herein set forth, then he shall prescribe in writing such other rules and regulations as he may deem best. He shall thereupon make out in writing a notice, and deliver it to the owner or person or persons in charge of said stock, setting forth the number and kind of stock so diseased, with the nature and character of the disease, with a peremptory order that said live stock shall not be moved from the locality where placed under this order until released by said veterinary surgeon, or until the arrival of the sheriff with orders for the destruction of said diseased or infected stock, as hereinafter provided. He shall also immediately notify the county court, or the court of criminal correction, or other court with similar power, if the case be in a city where no county court exists, or two judges thereof in vacation, of the county in which said diseased stock may be found, setting forth in writing the number and kind of stock affected or infected, and the character and type of the disease, with the name of the person or persons in charge of said stock. He shall also give to said court notice of any change that he may have made in the manner of quarantine, together with a copy of the rules substituted therefor. The said veterinary surgeon may, in his direction [discretion], order owner or owners, or person or persons in charge, to bury or burn carcasses of dead animals, and such persons thereupon shall execute such order as prescribed.

Amendments. SEC. 3. That section eight of the act, as set forth in the first section of this act, be, and the same is hereby, amended as follows: By striking out the words "twenty-five" between the words "exceed" and "dollars" at the end of the forty-first line of said section, and inserting in lieu thereof the word "fifteen;" and by striking out the word "fifty" between the words "exceed" and "dollars," in the forty-third line of said section, and inserting in lieu thereof the word "twenty-five;" and by striking out the word "fifty" between the words "exceed" and "dollars" in the forty-fifth line, and inserting in lieu thereof the word "thirty;" and by striking out all of said section after the word "treasurer" in the fifty-third line, so that said section, after the sixteen lines thereof beginning with the words "Section 8788," shall read as follows:

Appraisement. SECTION 8783. Whenever a county court or a court of criminal correction, or other court mentioned in section 8781, in session, shall find from the evidence presented by any citizen of this State, as provided for in section 8782 of this article, that said citizen is the proprietor of any animal affected with glanders, or *maladie du coït*, or contagious pleuro-pneumonia, or rinderpest, and that said animal is in quarantine under this article, and that said animal became so diseased accidentally, and not through any inhuman or gross and willful neglect or scheming on the part of said proprietor; that said diseased stock was not already diseased when it came in possession of said proprietor; that said diseased stock did not come already affected with said disease from another State or from any Territory, or from any other country; that said diseased stock had not been exposed outside of Missouri three months prior to its importation in this State to any of the said contagious or infectious diseases, it shall be the duty of the said court to appoint three disinterested parties, who shall be stock owners,

to go and appraise said diseased and quarantined stock. Said appraisers, bringing with them the sheriff, shall at once proceed to the locality where said quarantined stock shall be, and there make the appraisalment, taking into consideration the condition of said stock, also the disease with which it is affected, in determining its value, and immediately report the same, in writing, to said court: *Provided*, That in cases of glanders reported to the court by the State veterinarian as acute, the appraisalment shall not exceed five dollars each; than [that] in cases of glanders reported by said veterinarian as subacute, the appraisalment shall not exceed fifteen dollars for each animal; that in cases of glanders reported by the same officer as chronic, the appraisalment shall not exceed twenty-five dollars for any case; that the appraisalment of any stock for any disease for which indemnity may be paid under this section shall not exceed thirty dollars for each animal. Said sheriff shall, after appraisalment, kill said stock and order the same burned or buried by the proprietor, and he shall embody a description of the same animals with the report of the appraisers to said court. Said court, upon receipt of such appraisalment, shall report the same to the governor, and the governor shall indorse thereon his order to the State auditor for payment of the same: thereupon the State auditor shall issue his warrant for the same on the State treasurer.

SEC. 4. Section 8794 of said act be and is hereby amended by striking out in the second line the word "twenty-five," and insert in lieu thereof the word "eighteen" hundred, so that said section, as amended, will read as follows:

Salaries and expenses. SECTION 8794. The State veterinary surgeon shall receive for his services the sum of eighteen hundred dollars per annum, and also his necessary traveling and incidental expenses in the discharge of his professional duties, payable out of funds provided for the maintenance of the veterinary service, quarterly or oftener, as the board may direct. The deputy veterinary surgeons shall receive seven dollars per diem and traveling expenses and incidental expenses necessary in the performance of their duties for each and every day actually and necessarily employed under this law, payable, also, by said board of agriculture out of appropriation for the veterinary service. Said State veterinary surgeon shall render account to said board of agriculture for the number of miles traveled by himself, deputies or inspectors, the help employed, and the cost thereof, and all the incidental expenses incurred in working under this law. Said account or accounts shall be audited, and, if found correct, shall be allowed, as now provided by law.

Approved April 11, 1895.

AN ACT to amend section three of the session acts of the State of Missouri of 1891, entitled "An act to prevent the spreading of infectious and contagious diseases among domestic animals by making it unlawful for persons to haul on the public roads and highways of this State, in counties having less than one hundred thousand inhabitants, the carcasses of animals that die of diseases," approved March 27, 1891.

Be it enacted by the General Assembly of the State of Missouri as follows:

Amendment of act of May 27, 1891. SECTION 1. That section 3 of the session acts of the State of Missouri of 1891, entitled "An act to prevent the spreading of infectious and contagious diseases among domestic animals by making it unlawful for persons to haul on the public roads and highways of this State, in counties having less than one hundred thousand inhabitants, the carcasses of animals that die of diseases," approved March 27, 1891, be, and the same is hereby, amended by striking out all of section 3 down to the word "provided," in line seven in said section, and inserting in lieu thereof the following: "The owners of swine that die of any disease shall dispose of the carcasses within twenty-four hours after they die by completely burying the same two feet deep or burning the same upon the premises where they have died. It shall be the duty of the owner of the swine that may be sick of any fatal disease to notify all persons owning or keeping swine on any adjoining premises of the existence of such diseases as soon as the fact is known. Upon the failure of any person to comply with the requirements of this act it shall be the duty of anyone having knowledge of the same to report the fact to the constable, who shall proceed forthwith to enforce the law as provided in this act by causing the carcasses to be disposed of by burying or burning the same at the expense of the owner: *Provided*, It shall be unlawful to bury such carcasses in or immediately adjacent to any water course, ravine, or slough leading through or onto other premises," so that said section, when amended, shall read as follows:

Section as amended. SEC. 3. The owners of swine that die of any disease shall dispose of the carcasses within twenty-four hours after they die by completely burying the same at least two feet deep or burning the

same upon the premises where they have died. It shall be the duty of the owner of swine that may be sick of any fatal disease to notify all persons owning or keeping swine on any adjoining premises of the existence of such disease as soon as the fact is known. Upon the failure of any person to comply with the requirements of this act it shall be the duty of anyone having knowledge of the same to report the facts to the constable, who shall proceed forthwith to enforce the law as provided in this act by causing the carcasses to be disposed of by burying or burning the same at the expense of the owner: *Provided*, It shall be unlawful to bury said carcasses in or immediately adjacent to any water course, ravine, or slough leading through or onto other premises: *Provided*, That nothing contained in this act shall be construed as interfering with the rights of any city, incorporated town or village making such disposition of the carcasses of such animals as may die or be found dead within the corporate limits of any such city, town, or village as the municipal ordinances and regulations of such cities, towns, and villages may provide.

Approved March 24, 1897

NEBRASKA.

AN ACT to prevent spread of hog cholera and other kindred diseases, and to prevent traffic in animals dying from infectious or other diseases, and to prohibit the removal or removal of swine and other animals dying of cholera and other infectious diseases over and along the public highway of said State, and to prohibit the giving away without consideration or receiving free such carcasses, and to prohibit rendering establishments and soap factories from purchasing or receiving free of charge such carcasses and to provide a penalty for the same, and to amend section 61 of articles 1 and 2 of chapter 4 of the Compiled Statutes of Nebraska for 1895.

Be it enacted by the Legislature of the State of Nebraska:

Disposing of carcasses. SECTION 1. If the owner of any swine or other domestic animal dying from hog cholera or other infectious or contagious disease, or if any other person assuming ownership or control shall dispose of or give away the carcasses of such swine or other domestic animal, or if any person shall buy, purchase, or receive without charge such carcass or other domestic animals dying from cholera or other disease, for manufacturing or rendering into lard or oil purposes, or for any other purpose or purposes, any such person so offending shall, upon conviction, be fined in any sum not less than twenty-five dollars nor more than one hundred dollars, or be imprisoned in the county jail for not more than ninety days.

Carcasses on public roads. SEC. 2. If any person shall, by any conveyance of whatever kind, remove or move along any or over any road or public highway the carcass or carcasses of any swine or swines or any other domestic animal that have died from cholera or other contagious or infectious disease, every such person, upon conviction, shall be fined in any sum not less than twenty-five dollars nor more than one hundred dollars, or be imprisoned in the county jail for not more than 90 days.

Carcasses; soap and oil men. SEC. 3. If any person or persons engaged in the manufacturing business, manufacturing of soap business, or the rendering of lard or oil business, shall buy, purchase, or receive free of charge the carcass or carcasses of swine or other domestic animals for any purpose, dying or having died of cholera or other contagious or infectious diseases, or if any such person or persons receive, have in stock or possession such carcass or carcasses, every such person or persons so offending shall, upon conviction, be fined in any sum not less than fifty dollars nor more than two hundred dollars, or shall be imprisoned for not more than six months, in the discretion of the court.

Quarantine notice; destruction of dead. SEC. 4. It shall be the duty of every person owning or keeping swine upon his premises, in which an outbreak of any contagious or infectious disease may occur, to immediately quarantine said premises by posting and keeping so posted during the continuance of said sickness or plague at least three placards not less than twenty-four inches in length and fifteen inches in width, bearing the name of the supposed disease, one of which placards shall be posted at the entrance to said premises and the other two in the most conspicuous places thereon; that it shall be unlawful for any person to remove or to allow to be removed from said premises any dead or diseased animals, but that all dead animals shall, within twenty-four hours, be burned or buried upon the premises;

that any person failing to comply with the provision of this section upon conviction thereof shall be fined in any sum not exceeding one hundred dollars.

SEC. 5. That section No. 61 of articles 1 and 2 of chapter 4 of the Compiled Statutes for 1895 and all acts or parts of acts in conflict with this act are hereby repealed.

SEC. 6. Whereas as emergency exists, therefore this act shall take effect and be in force from and after its passage.

Laws 1897.

NEVADA.

AN ACT to amend an act entitled "An act to prohibit the bringing of diseased animals within this State and to prevent the selling of diseased animals, poultry, fish, game, and other articles by butchers, merchants, and others to the general public," approved March 10, 1891, and declaring the violation of the provisions thereof a misdemeanor, and prescribing a punishment therefor, and providing for a liability in damages for the violation thereof and a mode for the collection of the same by civil action.

The people of the State of Nevada, represented in Senate and Assembly, do enact as follows:

SECTION 1. Section one of the act of which this act is amendatory is hereby amended, so as to read as follows:

Section 1. It shall be unlawful for any person, either for himself or as the agent, manager, or employee of any person, partnership, company, association, or corporation, or for any partnership, company, association, or corporation to do or cause to be done any or either of the following prohibited acts to wit:

Entry of infected stock prohibited, when. First. To bring or drive or cause to be brought or driven into the State of Nevada, any sheep, cattle, or horses having any infectious or contagious disease, or which have been herded or brought into contact with any other sheep, cattle or horses having such disease at any time within ninety days immediately prior to their importation into the State of Nevada.

Conditions of entry of live stock. Second. To bring or drive or cause to be brought or driven into the State of Nevada between the last day of March and the first day of November, in any year, any sheep, cattle, or horses from any State, Territory, or country situated south of the 36° parallel of north latitude, unless such sheep, cattle or horses have been held at some place north of the said parallel of latitude for the period of at least ninety days immediately preceding their importation into the State of Nevada, or unless the person, partnership, company, association, or corporation owning, transporting, or having charge of such sheep, cattle, or horses shall procure from the State board of health a certificate or bill of health to the effect that said sheep, cattle, or horses are all entirely free from every infectious or contagious disease, or shall prove to the satisfaction of the State board of health, and secure its certificate that none of such sheep, cattle, or horses have been exposed, at any time within the ninety days immediately prior thereto to any of such diseases.

Payment of expense. The expense of any inspection connected herewith shall be paid by the owner or owners or managers or transporters of such sheep, cattle, or horses.

SEC. 2. Section seven, of which this act is amendatory, is hereby amended so as to read as follows:

Board of health to issue certificate. Section 7. It is hereby made the duty of the State board of health to issue upon the application of any person, partnership, company, association, or corporation named in this act, after satisfactory proof and examination of any sheep, cattle, or horses found to be entirely free from all the diseases and dangers in this act specified, to issue to such person, partnership, company, association, or corporation a certificate or bill of health certifying such good health and freedom from dangerous contact of such sheep, cattle, or horses as is mentioned in section one of this act, and it is hereby made the duty of any sheriff, constable, policeman or other peace officer or any member of said State board of health to forthwith remove, and they and each of them are hereby authorized and empowered, whenever he or they shall become aware of the existence thereof, any of the animals or articles named in section [two] of the act of

which this act is amendatory, at the expense of the owner or owners thereof, in a manner that will insure safety and protection to the public. It shall be the duty of the State board of health, in cases of diseased stock, to employ a competent veterinary surgeon to inspect and investigate such stock.

Penalty. SEC. 3. If any person, partnership, company, association, or corporation shall bring or cause to be brought into this State any sheep, cattle, or horses in violation of the provisions of section one of this act, or shall by false representation procure a certificate of health as provided in section two of this act, he or they shall be liable to a civil action in any court of competent jurisdiction within the State of Nevada by the party injured for all damage sustained on account of disease communicated by or from such sheep, cattle, or horses, and action therefor is hereby authorized to be brought in the same manner as other suits for damage in a civil action in this State; and the judgment for damages in any such action shall include the costs of action, and such judgment shall be a lien upon all such sheep, cattle, or horses, and a writ of attachment may issue in the first instance, and the court rendering such judgment may order the sale of said sheep, cattle, or horses, or so many thereof as may be necessary to satisfy said judgment and accruing costs. Such sale shall be conducted as other sales under execution.

SEC. 4. Section eight of the act of which this act is amendatory is hereby amended so as to read as follows:

Penalty. Section 8. Every person violating any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not exceed [ing] five hundred dollars, nor less than twenty dollars, or by imprisonment in the county jail for a term not more than six months nor fewer than twenty days.

Approved March 16, 1895.

NEW MEXICO.

AN ACT for the appointment of sheep inspectors and the prevention and cure of scab and other diseases in sheep.

Be it enacted by the Legislative Assembly of the Territory of New Mexico:

Appointment of sheep inspector. SECTION 1. That the board of county commissioners of each county, upon the written request of the president or secretary of any organized woolgrowers' association, or any ten sheep owners of any county, shall appoint a capable person who is an owner of sheep as sheep inspector of such county, who shall hold his office for two years and until his successor is appointed and qualified, and who shall perform such duties as are prescribed, or be removed. Upon the petition of a majority of the sheep owners of any county, it shall be the duty of the board of county commissioners where such petitioners reside to remove such inspector and appoint the person named in such petition.

Qualifications of inspector. SEC. 2. Such inspector shall be a resident of the county; he shall take the oath of office and give bond in the sum of two thousand dollars, with good sureties that he will faithfully perform his duties. Such bond shall be approved by the clerk of the probate court and the chairman of the board of county commissioners, who shall endorse such approval on such bond as follows: "We are acquainted with the sureties herein and believe them each to be worth the amount of the penal sum of the within bond, above their just debts and liabilities." Such bond, with the oath of office endorsed thereon, shall be recorded, at the expense of such inspector appointed, in the office of the clerk of the probate court of the county in which such inspector shall reside, and may be sued on by any person injured by the unfaithful performance of such inspector's duty: *Provided*, That no suit shall be so instituted after more than twelve months have elapsed from the time the cause of action accrued.

Duties of inspector. SEC. 3. It shall be the duty of the sheep inspector to inspect all sheep in his county, of which he shall receive notice as hereinafter provided; and in case the same are not diseased he shall give a certificate of such fact; but if the same or any of them be diseased, the regulations for their holding and quarantine shall at once be made by him, and if, in his judgment, it shall be necessary, he shall personally supervise the dipping of scabby sheep. He shall report in writing the result of his inspection to the clerk of the

probate court of the county within his jurisdiction, to be filed by him for reference for the board of county commissioners or any party concerned, and, if so directed, once in every two weeks thereafter to reinspect said flock and report in writing the result and treatment, if any, in the same manner until said disease is cured: *Provided*, That in case of removal of the flock six miles from the range of any other sheep he shall make one inspection every two months.

Compensation of inspector. SEC. 4. He shall receive five cents per mile for every mile necessarily traveled, and one-fourth cent per head for each sheep inspected, and three dollars per day for each day spent in supervising dipping, said fees to include all traveling expenses. He shall receive ten per cent of all fines and penalties collected in cases where he gives the information, and shall be a competent witness therein, and all such fines and penalties shall be paid into the "sheep-inspection fund."

Payment of expense. SEC. 5. Whenever any sheep inspected are found to have the scab, all expenses provided for in this act shall be paid by the owner or renter of such sheep, and shall be a lien thereon; but if no scab exists, then all expenses shall be paid from the "sheep-inspection fund," after the inspector's account shall be approved and allowed by the board of county commissioners. If there is no money in said fund payment shall be deferred until there is.

Quarantine. SEC. 6. Upon the receipt of written information that any sheep in his county are affected with scab, or if in his judgment they have been exposed to it, the inspector shall examine the same, and if found infected he shall quarantine them to be held within a certain limit to be defined, and they shall be so held until the owner, renter, or person in charge shall have effectually eradicated such scab. All expenses shall be paid by the owner, renter, or person having the sheep in charge.

Sheep not to be removed without permission of inspector; exception. SEC. 7. In no case shall any scabby sheep, or any that have been scabby within two months, be allowed to be removed from one place to another without the written certificate of the sheep inspector: *Provided*, They may be moved to a dipping "corral" with the written consent of all the owners on the route; and any person violating this provision shall be fined in a sum not less than twenty-five dollars nor more than fifty dollars for each offense upon conviction thereof in any court of competent jurisdiction, which fine, when collected, shall be paid into the "sheep-inspection fund" of the county treasury, and any judgment for such fine and costs shall be a lien on such sheep, said fine and costs to be collected by suit brought in the name of the Territory.

Penalty. SEC. 8. Whenever a sheep inspector shall willfully and falsely report any sheep subject to disease he shall be subjected to a fine of ten times the amount of fees charged by him for inspecting; and if he shall willfully and falsely report any sheep inspected by him free from disease that are thus affected, he shall be subjected to a penalty not exceeding three hundred dollars for each offense.

Removal of inspector, when. SEC. 9. The board of county commissioners of any county in this Territory are hereby authorized and empowered to summarily remove any sheep inspector found guilty of either of the offenses set forth in the foregoing section.

Penalty for withholding facilities. SEC. 10. The owner, renter, agent, or employee of any flock of sheep requiring inspection, or about to be inspected, shall afford the inspector all reasonable facilities for making his inspection; and for any violation of the provisions of this act said owner, renter, his agent or employees, shall be fined not less than ten dollars nor more than fifty dollars, and every separate day's offense shall constitute a separate offense, and the written report of any offense made by an inspector under oath shall be *prima facie* evidence of the commission of said offense, and any justice of the peace of the county in which the offense is committed shall have jurisdiction thereof, and the inspector shall *ex officio* report all violations of the provisions of this section of which he has knowledge.

Right to drive to dipping works. SEC. 11. Every owner, renter, agent, or employee of a flock of sheep having scab, or other diseases, shall have the right to drive over the intermediate ranges to his own dipping works, or to any public or private dipping works, but in so doing he or they shall consult the owners or occupants of said ranges twenty-four hours before reaching the nearest limits of the same as to where he shall cross the

same, and in no case shall he enter another's "corral" or inclosure, or water at his troughs or accustomed watering places with his diseased sheep without the written or otherwise expressed consent of the owner, and he shall take every possible precaution to avoid mixing his diseased sheep with any other flock or flocks. For each and every violation of the provisions of this section he shall be subjected to a penalty of not less than ten dollars nor more than one hundred dollars, and shall be held liable for damages in case any other flock of sheep contract disease through his carelessness or failure to comply with this law.

Precaution in driving. SEC. 12. Every person driving a flock of sheep from one range to another, or through any portion of this Territory, shall use every precaution to avoid mixing his sheep with those belonging on the range through which he may be driving, or with sheep being driven by other persons; and a willful or careless neglect of the provisions of this section shall subject the party so offending to civil suit for damages by the person with whose sheep his sheep may become mixed, and to a fine of not less than ten dollars nor more than fifty dollars: *Provided*, That this section be not construed as to prevent the proper herding of sheep on their accustomed ranges.

Separation of diseased sheep. SEC. 13. The owner, renter, or agent of any flock reported by the inspector to be diseased shall immediately herd it so it can not range upon or within one mile of any grounds accustomed to be ranged upon by any other sheep, and shall restrain it from passing over, or traveling upon, or within one mile of any public highway or road; and in case this can not be done he shall immediately remove said sheep to a locality where they shall not be permitted to range within less than six miles of any other flock of sheep, and said sheep shall continue to be herded under the above restrictions until upon inspection they shall be reported to be free from disease.

Notification of sheep crossing Territorial line. SEC. 14. Upon the proposed arrival of any sheep into this Territory from any other Territory or State, the owner or agent shall report the same to the sheep inspector of the county: also by registered letter to the chairman of the board of county commissioners of the county into which such sheep are to be first taken, stating the time and place at which he proposes to cross the Territorial line. The inspector shall, as soon as possible, inspect the same.

Penalty and expense. SEC. 15. In case of failure to so report, the person offending shall be fined from one hundred dollars to five hundred dollars by a court of competent jurisdiction, which fine, when collected, shall be paid into the "sheep-inspection fund" of the county treasurer, and any judgment for such fine shall be a lien on such sheep, said fine and costs to be collected by suit brought in the name of the Territory. The expenses of inspection shall be paid by the owner or agent and shall be a lien on the sheep. If on inspection such sheep are found to have no scab, the inspector shall give a certificate to that effect; but if such scab is found, such sheep shall be quarantined as herein provided.

Sheep-inspection fund. SEC. 16. All moneys accruing from fines and penalties hereunder shall constitute a separate fund, to be known as the "sheep-inspection fund," and shall be used only for the inspection of sheep. When such fund shall exceed five hundred dollars, the surplus shall be transferred to and become a part of the "general county fund."

Inspection record. SEC. 17. Every inspector shall keep a book, to be known as the "inspection record," in which he shall enter all his official acts and proceedings. It shall show the name of the owner, renter, or agent of every flock of sheep inspected, when the same was inspected, the names of persons to whom certificates have been granted and when, and all orders and directions made in regard to any matter therein contained.

Report to county commissioners. SEC. 18. He shall also make a written statement of his official acts to the board of county commissioners on the first Monday of January and the first Monday of July of each year, and the same shall be for the inspection of the public; and on the inspector's death, resignation, or removal the said "inspection record" shall be deposited in the office of the clerk of the probate court.

Penalty. SEC. 19. Any person failing to comply with any order of the inspector under this act shall be fined from twenty-five dollars to one hundred dollars.

Scabby sheep prohibited. SEC. 20. It shall be unlawful for any person to bring into this Territory any sheep affected with scab. Every person so offending shall be fined from one hundred to five hundred dollars, or sent to the county jail from one to three months, or both.

Appointment of second inspector. SEC. 21. Whenever the board of county commissioners think it necessary, or on the application of any ten owners or renters of sheep in any county, it shall immediately appoint a second inspector, and define as nearly as possible the portion of the county in which he shall perform his duties, and he shall qualify in the same manner as the first inspector and be subject to the same regulations.

Penalty for annoyance. SEC. 22. Any inspector who shall officially oppress, annoy, or injure any person or persons unjustly shall, upon conviction, be fined from one hundred to five hundred dollars.

SEC. 23. This act shall be in force from and after the first day of August, 1895; and any act or parts of acts in conflict herewith are hereby repealed.

Approved February 27, 1895.

AN ACT to prevent the introduction and spread of disease among sheep in New Mexico, and providing remedies therefor.

Be it enacted by the Legislative Assembly of the Territory of New Mexico :

Appointment of sanitary board. SECTION 1. A sheep sanitary board, consisting of three practical sheep raisers and owners, is hereby created for the Territory of New Mexico, which Territory, for the purpose of this act, is hereby divided into three sheep sanitary districts, as follows: First district, Lincoln, Chaves, Eddy, Grant, Donna Ana, Sierra, and Socorro; second district, Valencia, Bernalillo, San Juan, Rio Arriba, Taos, and Santa Fe; third district, San Miguel, Guadalupe, Mora, Colfax, and Union. The governor shall nominate members of said board, one from each of the several districts, and appoint them by and with the advice and consent of the legislative council, who shall serve for the period of two years from the approval of this act and until their successors are appointed and qualified, as hereinafter provided; and in case of any vacancy in said board from any cause the governor shall fill such vacancy by appointment, and such appointee shall hold only during the unexpired term for which he was appointed: *Provided*, That each member of such board must be a practical sheep man and owner of sheep and a bona fide resident within the district from which he is appointed, and his permanent removal therefrom to another district shall cause a vacancy in such board.

Rules and regulations; bond. SEC. 2. Such board shall organize within thirty days after passage of act by electing a president and vice-president from among their number, and also by the selection of a secretary, who need not necessarily be a member of the board, but who shall be a sheep owner. Such board shall select permanent headquarters, which shall not be changed within the fiscal year in which they are established, and the secretary shall permanently reside thereat. Regular meetings of the board shall be held at such headquarters twice in each fiscal year, and special meetings may be held upon the call of the president thereat at such times as the president may deem necessary, upon a call issued therefor. The members of such board shall receive no compensation whatever, except that they may be reimbursed for necessary actual expenses incurred in the attendance upon meetings of said board, upon itemized bills therefor, audited and allowed by the president and secretary of said board. The secretary shall be paid such salary or compensation for his services as may be agreed upon between him and the board. The secretary of such board shall, before he enters upon the duties of his office, qualify by giving a bond to the Territory of New Mexico, with good and sufficient sureties, to be approved by the president, in the sum of not less than one thousand dollars, conditioned for the faithful performance of his duties under the law and the rules and the regulations of the board, which bond may be sued upon in the name of the Territory for the benefit of any person interested. The secretary shall keep full minutes of the actions of the board at regular and special meetings, and also all record books, lists, and other documents necessary or convenient for the transaction of the business of the board as may be provided for in its rules and regulations.

Requirements and authority of board. SEC. 3. The board hereby created is authorized and required to adopt and publish such rules and regulations as may be necessary to carry into effect the provisions of this act, and for the convenient and effective dispatch of its business

such board shall also have the power, and it is hereby directed, to appoint sheep inspectors, not to exceed two in any one county of the Territory, and one at least in each county, who shall be under the immediate control, direction, and authority of the said board, and who shall be governed by its rules and regulations. Such inspectors must be bona fide residents of the county from which they are appointed, and practical sheep men and owners of sheep, and before they enter upon the duties of their office each shall give a bond to the Territory of New Mexico in the sum of five hundred dollars, conditioned for the faithful performance of the duties of his office, with at least two sufficient sureties, to be approved by the president of the board, which bond may be sued upon in name of any person interested. It shall be the special duty of said sheep inspectors to carefully enforce all the provisions of this act and of the rules and regulations of said board, and for the purpose of carrying out the same they and each of them shall have special police powers to enforce such laws, rules, and regulations by making complaints or arrests without warrant in case of any violation of any of the provisions of this act. The compensation to be paid such inspectors for their services shall be agreed upon between them and the said board, according to the circumstances of the several cases and the services rendered by such inspectors, the same to be paid upon warrants drawn by the president and secretary of said board.

Inspection of sheep upon arrival; fees. SEC. 4. No sheep shall be allowed to enter the Territory of New Mexico from any other country, State, or Territory until the person proposing to enter such sheep shall have given the secretary of the board at least ten days' notice, by registered mail, of such intention. Upon receiving such notice the secretary shall direct the inspector nearest to the proposed point of entry to proceed to such point and inspect such sheep, for which service the owner shall pay to said inspector a fee of ten cents on rams and five cents per head on stock sheep, which amount shall be sent by such inspector forthwith to the secretary of the board, together with his report of such inspection, which shall include the name of the owner, the number of rams and sheep, respectively, average age, and quality and point of destination in the Territory, with a statement of the condition in which said sheep were found. If at such inspection such rams and sheep are found clean and healthy, the inspector shall issue to the owner a certificate to that effect and allow such sheep admission in the Territory; otherwise such inspector shall require such sheep to be dipped at once at the place of inspection, under the rules and regulations and in the manner prescribed by the board and at the expense of the owner of such sheep.

In case of said person failing to give notice to the secretary of the board on notice received from any sheepman he shall direct the sheep inspector to the place where the sheep may be and inspect such sheep, for which service the owner shall pay to the said inspector double the amount heretofore provided for.

Rules and regulations. SEC. 5. All sheep within the Territory must be dipped at least once each year, in accordance with the rules and regulations to be established by the board, and be inspected at least once each year by the inspectors above provided for, who shall forthwith make a report thereof to the secretary of the board, given [giving] the number of sheep in his district, the owners of the same, and also as to their condition of health or having any infectious or contagious disease or parasites, which report the secretary of the board shall record in a proper book for reference. No sheep afflicted with scab or other contagious or infectious disease or parasites shall be allowed to travel except between the ranch where they belong and the dipping vats, and then only under the regulations prescribed by the board; and any flocks of sheep which shall have scab shall be dipped twice or more times a year, as shall be determined by the board, until pronounced clean by the inspector: *Provided*, That the dipping heretofore provided for shall not be done during the inclement months of the year during the prevalence of storms.

Appeals from decisions. SEC. 6. Appeals from the decisions and orders of inspectors may be taken by any person aggrieved to the board under such rules and regulations as may be provided therefor by such board, and the decision of the board thereon shall be final; and if any person refuses to comply with the orders of the board and its decisions, such board may compel obedience thereto in a summary manner by presenting the case to a district judge, who shall thereupon cause a warrant to be issued to bring the offending party forthwith before him for a hearing, and the refusal of any such person to obey any of the orders or decisions of said board shall be a ground of attachment against the sheep owned by him, which attachment shall issue without bond on the affidavit of the president of said board, and shall be for an amount to be named in such affidavit by the president of said board, and afterwards such pro-

ceedings shall be had therein as in ordinary cases of attachment: *Provided*, That the said board shall not be required to advance any fees or costs in such case, and any sheep inspector herein provided for may serve the process of said court and perform the duties of the sheriff of his county in serving and levying and making return of said writ to the same extent as the sheriff himself could do.

To prohibit sale of sheep defined in this act. SEC. 7. No person shall sell or otherwise dispose of any sheep as defined in this act, or purchase or receive any such sheep, without giving and receiving a bill of sale in writing therefor, as provided in the Compiled Laws of New Mexico, from sections 64 to 70, inclusive, with reference to neat stock; and all of the provisions of said sections 64, 65, 66, 67, 68, 69, and 70 of the compiled laws are hereby extended to and made applicable to sheep, including all the penalties for violations of said sections provided for therein, and the sheep inspectors hereinbefore provided for are hereby clothed with special police powers to enforce the provisions of those sections and of this law.

Penalty. SEC. 8. For any violation of any of the provisions of this act by any member of the said board or any inspector, officer, or agent of the same, such member, officer, or agent shall forfeit his office and pay a fine of not more than one hundred dollars, to be imposed by any court having competent jurisdiction, which fine shall be paid into the Territorial treasury, to be credited to the fund set apart for the sheep sanitary board, as hereinafter provided for.

Tax; "Sheep sanitary fund." SEC. 9. It shall be the duty of the county commissioners of each county in the Territory, at the time of levying other taxes, to levy a special tax of one and one-half mills per head on each sheep and goat within their respective counties, to be known as the "Sheep sanitary fund;" such special tax shall be collected in the several counties and paid to the Territorial treasurer in the manner provided by law for the collection and payment of other Territorial taxes.

Disposition of fund. Such fund shall be kept separately by such treasurer and shall be used exclusively for the payment of the expenses necessarily incurred by the sheep sanitary board in the administration of this act, and for the payment of fees, wages, costs, and expenses in the conduct of such board. All inspection fees or fines collected by said board shall in like manner be turned in to the Territorial treasurer for the same purpose, and such fund shall be paid out by the Territorial treasurer on the order of said board only. Such special tax shall be assessed, levied, and collected at the expense of the several counties, and in case the county commissioners of any county shall fail or neglect to make the levy provided herein, they shall each become personally responsible to said fund in an amount equal to twenty-five per cent of said levy, to be collected from them and their bondsmen for the exclusive benefit of said fund.

SEC. 10. Wherever in this act the word "sheep" is used it shall be held to include rams and goats.

SEC. 11. All acts and parts of acts in conflict herewith are hereby repealed and this act shall be in force and effect on May 1, 1897, and after its passage.

Approved March 18, 1897.

Be it enacted by the Legislative Assembly of the Territory of New Mexico:

Quarantine. SECTION 1. Whenever the cattle sanitary board of this Territory shall have reason to believe that contagious pleuro-pneumonia, tuberculosis, or any other contagious or infectious disease fatal to cattle exists or has become epidemic upon any premises or in any locality in this Territory, it shall be the duty of said board to employ a competent veterinarian, who shall examine, and if deemed necessary, quarantine, under such rules and regulations as said board may prescribe, all cattle suspected of being so diseased or that have been exposed to such disease.

Slaughter of diseased cattle. SEC. 2. Whenever it shall be necessary in the opinion of said veterinarian, in order to stamp out and prevent the spread of such disease, that the diseased cattle and those that have been exposed thereto, should be slaughtered, he shall report the same to said sanitary board, and if the said board be satisfied of the correctness of said report and the necessity therefor they shall cause such cattle to be slaughtered under the direction of the board or said veterinarian, and the carcasses to be disposed of as the board may direct.

Indemnity fund. SEC. 3. Prior to such slaughtering the board shall appoint one disinterested person resident of the county wherein such cattle are to be slaughtered, who shall act with a like disinterested person to be

appointed by the owner of such cattle, and fix the price to be paid out of the cattle indemnity fund or the funds realized from the special tax provided for in section 20 of Chapter CVI, session acts of 1889, as an indemnity for the slaughter of such animals, and in event said two appraisers are unable to agree, they shall choose a third disinterested resident of said county to act with them in such appraisement.

Indemnity. SEC. 4. All claims for indemnity for cattle slaughtered under the provisions of this act shall be presented to the board, with the sworn certificate of such appraisers, and shall be paid out of any funds at the disposal of said board not otherwise appropriated: *Provided*, That no indemnity shall be paid for cattle which were diseased when brought into this Territory or which the owner thereof knew or had good reason to believe were so diseased when they came into his possession, nor for any cattle brought into the Territory contrary to law. Any person aggrieved by such appraisement and award may appeal to the district court for the county in which said cattle were slaughtered, but such appeal shall not delay the slaughtering of such cattle; and such appeal shall be docketed and tried as appeals from justices of the peace are docketed and tried.

Penalty. SEC. 5. Any person or persons or the agent or employee of any firm or corporation who shall refuse to permit animals suspected of being diseased to be inspected, quarantined, or slaughtered, as provided in this act, or who shall willfully interfere with said veterinarian or the sanitary board or any of its officers or employees in the discharge of their duties in relation to the inspection, quarantine, or slaughter of such animals, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined for such offense in a sum not less than fifty nor more than one hundred dollars, or imprisoned in the county jail for not less than thirty nor more than sixty days, or both such fine and imprisonment in the discretion of the court or justice trying the case.

SEC. 6. All laws and parts of laws in conflict with any of the provisions of this act are hereby repealed, and this act shall be in force from and after its passage.

Approved March 18, 1897.

AN ACT in relation to live stock.

Be it enacted by the Thirty-second Legislative Assembly of the Territory of New Mexico:

Attorney to represent board. SECTION 1. The cattle sanitary board of New Mexico shall have authority to employ a competent attorney to give advice and counsel in regard to any matter connected with the duties of the board, to represent the board in any legal proceedings, and to aid in the enforcement of the laws in relation to live stock, and to fix the compensation to be paid to such attorney.

For the purpose of providing funds therefor and for the employment of additional inspectors, and other necessary expenses incurred by said board, a special tax shall be levied upon all cattle in the several counties of this Territory in the manner and according to the provisions of section 20 of Chapter CVI of the acts of the 28th session of the Legislative Assembly of the Territory of New Mexico, which levy shall be within the limit provided for in said section. Upon the order of the governor, auditor, and treasurer, as provided in said section, the county commissioners of the several counties shall cause such levy to be made upon the assessed valuation of all cattle of the bovine species within their respective counties and shall cause such tax to be collected and paid over to the Territorial treasurer to the credit of the cattle indemnity fund.

SEC. 2. This act shall take effect and be in force from and after its passage.

Approved March 18, 1897.

NEW YORK.

AN ACT to amend the public health law in relation to the appointment of a special committee of the State board to investigate the disease of tuberculosis.

The people of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. The public health law is hereby amended by adding at the end of article four thereof a new section, to be section sixty-five thereof, and to read as follows:

Duty of committee; salary; record. SEC. 65. Special committee of State board: The State board of health may appoint two of its members as a committee whose particular duties shall be to carry out the

provisions of the public health law relating to tuberculosis in cattle, and such members so appointed shall be entitled to receive a salary of two hundred and fifty dollars per month and any necessary expenses, and they shall hold office for one year. Such committee shall keep a complete record of all the work done and submit monthly reports thereof to the State board of health.

SEC. 2. This act shall take effect immediately.

Approved June 14, 1895.

NORTH DAKOTA.

AN ACT to prevent the spread of contagious, infectious, and epidemic diseases among domestic animals, creating the office of chief State veterinarian, prescribing the duties thereof, and appropriating money for the necessary expenses thereof.

Be it enacted, etc.:

Veterinarian. SECTION 1. The professor of veterinary science of the State Agricultural College is hereby made chief State veterinarian, who shall serve as such without salary, and who shall, upon entering upon his duties, take an oath to well and truly perform all the duties required of him by law, which said oath shall be taken before any judge of a district court, or notary public within the State, and shall be filed with the secretary of state.

"Veterinarian districts;" term of office. SEC. 2. The State shall be divided into seven "veterinarian districts," in each of which there shall be appointed by the governor, by and with the consent of the senate, one competent veterinarian, who shall be known as the "district veterinarian," who shall hold their office for a term of two years from the date of their appointments, respectively, unless sooner removed for cause, and who, upon entering upon their duties, shall each take an oath to well and truly perform their duties as provided by law, which said oath shall be taken before any judge of the district court or notary public within the district of the State for which they may be appointed, and shall be filed with the secretary of state.

Districts. SEC. 3. District No. 1 shall consist of the first judicial district. District No. 2 shall consist of the second judicial district. District No. 3 shall consist of the third judicial district. District No. 4 shall consist of the fourth judicial district. District No. 5 shall consist of the fifth judicial district. District No. 6 shall consist of the sixth judicial district. District No. 7 shall consist of the seventh judicial district.

Duties of veterinarian. SEC. 4. The duties of said chief State veterinarian shall be to ascertain by personal examination, or through report from the district veterinarian, in such manner as he shall prescribe, all information that he can obtain regarding the existence of any or all contagious, infectious, and epidemic diseases in the State. He shall also make a complete and permanent record of all reports of the district veterinarians; shall make an examination of all diseased animals or portions of any such that may be forwarded to him by the district veterinarians, and upon completion of such examination shall instruct the district veterinarians in such way as he may deem proper in regard to the treatment of similar cases. It shall also be his duty to furnish material, as far as lies in his power, for the diagnosis of contagious diseases and instructions as to its uses. In case that remedies are discovered for the prevention or cure of contagious diseases, such as glanders, tuberculosis, anthrax, hog cholera, foot-and-mouth disease, and foot rot, it shall be his duty to furnish the district veterinarian, or any person or persons he may see fit to appoint, the remedies so discovered, with full directions for application. He shall also be empowered to make quarantine regulations and enforce the same, after approval and authority by the governor. He shall further prescribe, with the consent of the governor, the rules and regulations necessary to carry out the purposes of this act.

Duties of district veterinarians. SEC. 5. The duties of said "district veterinarians" shall be as follows:

First. To investigate in person any and all cases of contagious, infectious, and epidemic diseases among cattle, horses, mules, sheep, asses, and other domestic animals within his district of which he may have knowledge, and which may be brought to his notice by any resident or any other person in any locality within his said district where such disease may exist; and it shall also be his duty, in the absence of specific information, to make visits of inspection to any locality within

his district where he may have reason to believe that there are contagious or infectious diseases existing among such domestic animals.

Second. To seize and inspect in person at the State line bordering on his district any horses, mules, cattle, asses, sheep, or other domestic animals which may be unloaded temporarily or consigned to any point within his district of the State, when the owner, agent, or person in charge thereof shall not upon demand produce certificates of health of such animals satisfactory to him from a duly authorized State or district veterinarian or examiner of the State from which said animals have been shipped.

Third. To examine in person, so often as he may deem reasonable, all pens, enclosures, and cars within the district within which domestic animals may be confined or transported, and to require the owner, agent, or person in charge of all such pens, enclosures, and cars to keep the same in proper sanitary condition.

Fourth. To require in person the owner, agent, or person in charge of all pens, enclosures, or cars within which domestic animals may be confined or transported to cleanse, fumigate, and disinfect all pens, enclosures, or cars within which such domestic animals may be confined or transported, within two days after written notice, when, in his opinion, such cleansing, fumigating, and disinfection shall be necessary for the prevention of the spread or outbreak of any contagious or infectious disease among such animals.

Fifth. It shall also be the duty of the district veterinarian in person to seize and inspect all domestic animals coming into, and to remain within his district of the State, without a certificate of the health of such animals from a duly authorized State or district veterinarian or examiner from the State from which said animals have been shipped, and before such animals shall be allowed by the district veterinarian to be transported into and to remain within the State. In addition to such inspection, he shall, in person, require from the owner, agent, or person in charge of such animals an affidavit to the effect that such animals have not been exposed to any infectious or contagious disease for a period of at least ninety days prior to the making of such affidavit and, in case that the district veterinarian shall have reason to believe that any domestic animals have been exposed to, or have contracted any contagious or infectious disease, it shall be his duty to seize and inspect such animals, notwithstanding any certificate of their health by any veterinarian or examiner of any other State, and report the same to the chief State veterinarian.

Fees; certificate. SEC. 6. Whenever any domestic animals are seized and inspected under the provisions of this act by the district veterinarian while such animals are being transported in cars, on shipboard, or brought into the State in any other manner, the district veterinarian making such seizure and inspection shall require the owner, agent, or person in charge of such animals to pay one-half cent each for the inspection of sheep and twenty-five cents each for all other animals named herein. All money so collected shall be immediately transmitted to the chief State veterinarian, together with a detailed report of the seizure and inspection; and it shall be the duty of the chief State veterinarian to transmit monthly all money collected as inspection fees under the provisions of this act to the State treasurer, who shall receipt to the chief State veterinarian. All such fees shall be paid by the State treasurer into the State treasury general fund; provided, that no inspection shall be made by any district veterinarian of any domestic animals in transit through the State without special instructions from the chief State veterinarian where the owner, agent, or person in charge thereof shall produce certificates of the health of such animals from a duly authorized veterinarian or examiner from the State from which said animals have been shipped.

Quarantine. SEC. 7. In all cases of contagious or infectious diseases among domestic animals in this State the district veterinarian shall have authority to order the quarantine of the infected premises and animals within his district, and upon such order to immediately report the same to the chief State veterinarian, and in case such disease shall become epidemic in any locality within the State it shall be the duty of the district veterinarian of the district where such epidemic may exist or become known to immediately notify the chief State veterinarian, who shall thereupon have authority to enforce a permanent quarantine and prevent the removal therefrom of any animals of the kind among which said epidemic exists until the district veterinarian of such district locality shall report such animals to be in healthy condition, and upon such a report a certificate shall be issued by the chief State veterinarian permitting the removal of the animals that are reported to be healthy. The expense of holding and taking care of all animals quarantined under the provisions of this act shall be paid by the owner, agent, or person in charge of the same.

Quarantine. SEC. 8. In case of any epidemic diseases where premises and animals have been previously quarantined by order of the chief State veterinarian or by the district veterinarian, as hereinbefore provided, the district veterinarian is further authorized and empowered, when in his judgment it is necessary, to order that any and all diseased animals shall be quarantined at such places and in such manner as he may direct, and shall be held in such quarantine until released by certificate of the chief State veterinarian, as provided in section 7 of this act; and in case the district veterinarian shall find that any one or more of the animals

Slaughter of diseased animals. so quarantined are so diseased that it becomes necessary to destroy the same to prevent the spread of such disease to other animals, he shall at once serve, in person, a written notice of his intention to destroy upon the owner, agent, or person in charge of the animals so quarantined and condemned; and if such owner, agent, or person in charge of such animals feels aggrieved by the decision of the district veterinarian, and shall desire a consultation of veterinarians, notice in writing to that effect must within twenty-four hours thereafter be served upon the district veterinarian issuing the notice, and it is hereby made the duty of the resident district veterinarian to summon two district veterinarians from adjoining districts to appear and assist in diagnosing and pronouncing upon the character of the disease with which said animal or animals are supposed to be infected; and in case all three district veterinarians, or any two of them, declare said disease to be contagious or epidemic in its character, and that such animal or animals should be destroyed to prevent the spread of such disease to other animals, the district veterinarian of the district wherein the animal or animals are located shall immediately slaughter such animal or animals, and not otherwise, and shall then make in duplicate a written statement, setting forth distinctly the nature of the disease for which such animals were condemned and destroyed, to be served on each owner thereof, the original of each order to be filed by the district veterinarian with the chief veterinarian and the duplicate thereof given to the said owner, agent, or person in charge of said condemned animals. It shall be the duty of the owner, agent, or person in charge of any and all animals slaughtered under the provisions of this act to

Disposal of carcass. immediately bury the carcass of such slaughtered animals in a trench at least six feet in depth and at least four feet beneath the surface of the ground, or burn and consume such carcasses under the direction of the district veterinarian; and it is hereby made the duty of the district veterinarian, in person, to require the owner, agent, or person in charge of such slaughtered animals within his district to immediately bury or burn under his personal supervision the carcasses of such slaughtered animals, as herein provided, except in all cases where the cause of death is due to anthrax, when they shall immediately be burned.

Report. SEC. 9. Each district veterinarian shall make a report at the end of every three months, and at such other times as may be required, to the chief State veterinarian, of all matters connected with his work, the forms of such reports to be furnished by the chief State veterinarian, and the chief State veterinarian shall transmit to the several boards of county commissioners, as often as he deems necessary, such parts of said reports as may be of general interest to the breeders of live stock, and he shall also give information in writing as soon as he obtains it, to the various boards of county commissioners, of each case of suspicion or fresh outbreak of disease in any locality, its causes, and the measures adopted to check it.

Duty of owner. SEC. 10. It shall be the duty of any owner, agent, or person in charge of any cattle, horses, mules, asses, sheep, or other domestic animals, where such owner, agent, or person in charge thereof intends to bring any such animals into the State for distribution, sale, transportation, or permanent location therein, without a certificate of their health from a duly authorized veterinarian or examiner of the State from which such animals are shipped, to give notice in writing to the district veterinarian of the district of the State bordering on the State line from which said animals [are] brought at least three days before such animals are brought into this State beyond the quarantine station at the State line of such district; and it shall be the duty of any person or

Suspicious animals must be reported. persons who shall have knowledge or suspect that there is upon his or their premises or upon the public domain any case of contagious, infectious, and epidemic disease among domestic animals, to immediately report the same to the district veterinarian of the district wherein such animals or cattle may be, and a failure so to do, or any attempt to conceal the existence of such diseases, or a failure to give notice before passing the quarantine station at the State line of said

district, as in this section required, or to wilfully or maliciously obstruct or resist or disobey any order issued by the chief State veterinarian or the district veterinarian, or in any way interfere with the discharge of their duties, as set forth in this act, shall be deemed a misdemeanor, and any person or persons who shall be convicted of any one of the above acts or omissions shall be fined not less than fifty dollars nor more than two thousand dollars for each and every such offense; and upon conviction of such offense a second time shall, in addition to the above-named fine, be imprisoned in the county jail of the county wherein convicted, or as otherwise provided by law, for a term of not less than ninety days nor more than one year.

Resolutions. SEC. 11. The following resolutions shall be observed in all cases of disease covered by this act:

Disposal of diseased animals. First. It shall be unlawful to sell, give away, or in any manner part with any animal affected with, or suspected of being affected with, any contagious or infectious disease, and in case of any animal that may be known to have been affected with or exposed to any such disease within one year prior to such disposal, due notice of the fact shall be given in writing to the party receiving the animal.

Misdemeanor; penalty. Second. It shall be unlawful to kill for butcher purposes any such animal; to sell, give, or use as any part of it, or its milk, or to remove any part of the skin. A failure to observe these provisions shall be deemed a misdemeanor, and, on conviction, shall be punished by a fine not less than one hundred dollars nor exceeding two thousand dollars; and, in addition to the above-named fine, be imprisoned in the county jail for a term of not less than ninety days nor more than one year. It shall be the duty of the

Duty of owners and agents. owner, agent, or person having in charge any animal infected with, or suspected with being infected with, any contagious or infectious disease, to immediately confine the same in a safe place, isolated from all other animals, and with all necessary restrictions to prevent the dissemination of the disease until the arrival of the district veterinarian within and for the district wherein the same may be at the time. The above regulations shall apply as well to animals in transit through the State as to those resident therein, and the district veterinarian shall have full

Authority of veterinarian. authority, within his district, to examine, whether in yard, pasture, or stables, or upon the public domain, all animals passing through the State within his district or any part of it, and on detection or suspicion of disease take possession of and treat and dispose of such animals in the same manner as is prescribed for animals resident within this State.

Salary; bond. SEC. 12. Each of said district veterinarians shall receive for their services the sum of six hundred dollars per annum. The payment of such salary shall be made from any funds in the State treasury not otherwise appropriated, monthly, upon itemized vouchers signed and sworn to by each for his separate district and submitted to the State auditor, who shall draw warrants upon the State treasurer for the amount thereof, if found correct, separately. No person shall be competent under this act to receive the appointment of district veterinarian who is not at the date of his appointment a graduate

Qualifications. in good standing of a recognized college of veterinary surgeons, or who has not practiced veterinary surgery within the State for at least five years. Before entering upon the discharge of his duties he shall give a bond to the State of North Dakota, with a good and sufficient surety, in the sum of two thousand dollars, conditioned on the proper discharge of the same. No constructive mileage shall be paid under this act, nor shall the district veterinarian receive any mileage except when called in cases of consultation as hereinbefore provided, when he shall receive actual expenses paid by him.

Quarantine stations. SEC. 13. The district veterinarians shall select the place or places within their respective districts at which all animals referred to herein shall be quarantined.

Fines. SEC. 14. All fines collected under the provisions of this act shall be paid into the general funds of the State.

Duty of attorney-general. SEC. 15. It is hereby made the duty of the attorney-general or State's attorney of the respective counties of the veterinarian district to prosecute any case complained of by the district veterinarian of such district for prosecution in any justice or district court within

the jurisdiction of which any violation of this act may have been had, and on conviction of violation of any of the provisions of this act, the court, in addition to the penalties prescribed by law, shall add thereto reasonable attorney's fee, as it may be determined just in the premises.

Duty of inspector and veterinarian. SEC. 16. It shall, in addition to their duties already defined by law, be the duty of all sheep inspectors and the district veterinarian (who is hereby authorized to appoint such inspectors) to require all sheep inspectors within their respective districts to report to them in writing, at the end of each calendar month, any knowledge or information such sheep inspectors may possess relative to any diseased sheep which may be within his own or adjacent counties within the veterinarian district wherein said county or adjacent counties may form a part, and the district veterinarian shall report to the chief State veterinarian all the information that he obtains from the reports received from the sheep inspectors; and whenever, in the opinion of the district veterinarian, any sheep inspector within his district is incompetent to, or neglects or refuses to, attend in a proper manner to his duties, the district veterinarian of such district shall take charge of any diseased sheep in such county and dip and treat them in the manner provided for in the law relating to sheep inspectors—chapter 135, General Laws of 1885—and when such action shall become necessary he shall report the same to the chief State veterinarian, who shall give such assistance as is in his power, and in addition thereto the district veterinarian shall, when by reason of incompetency or neglect to perform his duties as such sheep inspector, the district veterinarian is hereby required to remove said inspector and to appoint some competent person in his place. The owner, agent, or person in charge of such sheep shall be required by the district veterinarian, upon his performance of duty as set forth in this section, to pay a fee of five dollars per day, together with the necessary expenses, and said fees shall be a lien upon the sheep inspected, subject to foreclosure the same as chattel mortgages. All fees or moneys collected by the district veterinarian under the provisions of this act shall be remitted, turned over, and receipted for the same as other funds that may pass through their hands, as prescribed by section 6 of this act.

District veterinarian to dip sheep. SEC. 17. In all the counties of this State where a sheep inspector has been or may be appointed as provided for by law, the resident sheep therein shall be under the supervision and inspection of such sheep inspector; provided, however, upon a written application signed by not less than three sheep owners, the district veterinarian shall visit such county and take such authority or give such directions as in his judgment is necessary.

Supervision by inspector. SEC. 18. The inspector shall receive for his services five dollars per day while necessarily employed in inspecting, which shall be paid out of the county general fund, and in the same manner and form as claims against the county are paid; provided, however, the board of county commissioners shall require such sheep inspector to present an itemized statement of the number of sheep inspected and the number of days actually employed in the performance of his official duties, such statement to be approved by the district veterinarian of the district in which such inspector is engaged.

Salary; requirements of commissioners. SEC. 19. In addition to the duties of the chief State veterinarian hereinbefore described, he shall make an annual report to the governor on or before the first day of December of all matters connected with his work, and in addition thereto may, from time to time, as in his judgment seems best, publish bulletins for general distribution, giving information as to the existence of animal diseases in the State, and such suggestions thereto as to care and treatment as he thinks proper.

Report of veterinarian. SEC. 20. For the purpose of carrying out the provisions of this act as herein set forth, there shall be appropriated, out of any money in the State treasury not otherwise appropriated, an annual sum of thirty-six hundred dollars with which to pay the salaries of the district veterinarians, and the further annual amount of five hundred dollars for stationery, clerk hire, and all traveling and other necessary expenses of the chief State veterinarian.

Appropriations. SEC. 21. In case of any serious outbreak of any contagious, infectious, or epidemic diseases among domestic animals, which can not be supervised by the district veterinarian, the chief State veterinarian shall at once notify the governor, who

shall thereupon appoint a sufficient number of deputies to perform the required duties at such compensation as he may deem proper, not to exceed five dollars per day for the actual time employed, the same to be paid out of the general fund of the State upon vouchers duly approved by the governor and the chief State veterinarian.

SEC. 22. All acts and parts of acts in conflict with the provisions of this act are hereby repealed.

Emergency clause. SEC. 23. An emergency exists in that the existing law is inadequate to prevent the spread of contagious and infectious diseases among domestic animals within the State, this act should take effect prior to July 1, 1895: *Therefore*, this act shall take effect and be in force from and after its passage and approval.

Approved, March 23, 1895.

OKLAHOMA.

AN ACT relating to animals.

Be it enacted by the Legislative Assembly of the Territory of Oklahoma:

Proof of ownership. SECTION 1. The owner of any estray swine, sheep, or other stock of the value of twenty-five dollars or less per head may, within six months, and the owner of any other such stock of a greater value than twenty-five dollars per head may, within twelve months from the time of taking up, prove the same before the justice of the peace who has custody of the book in which the description of said property is recorded, having first given three days' notice to the taker-up, in writing, of the time and place when and where such proof will be offered, and if the justice is satisfied from the evidence that the estray belongs to the claimant, he shall, upon payment by the claimant of all costs and expenses of keeping, order it to be delivered to the owner; and the justice shall certify to the county clerk, within thirty days, that such estray has been proven and returned to the proper owner; and the clerk shall make an entry of the fact stated in such certificate in the margin of the county records where such estray is recorded, in his office, which certificate shall cancel all liens for the costs that the county may have upon such estray.

Records; requirements. SEC. 2. That all parties butchering stock or purchasing hides or pelts in the Territory shall be required to keep a record of the marks, brands, color, from whom purchased, and, by the party butchering, sex and age. They shall be required to keep all hides together, with horns and ears complete, for at least five days from the time of butchering the same during the months of May, June, July, August, September, and October, and during the remaining months of the year, ten days, said hides to be free for

Penalty. inspection to anyone wishing to see the same. Any person violating any of the provisions of this section shall be guilty of a misdemeanor, and, upon conviction in any court of competent jurisdiction, shall be fined in any sum not less than twenty-five dollars nor more than two hundred dollars, or shall be imprisoned in the county jail not less than ten days nor more than six months, or by both such fine and imprisonment, at the discretion of the court.

SEC. 3. That section 9, article 3, chapter 2, statutes of Oklahoma, 1893, and all acts and parts of acts in conflict with this act are hereby repealed.

SEC. 4. This act shall take effect and be in force from and after its passage and approval.

Approved February 16, 1895.

AN ACT amending section 5, chapter 1, of the statutes of Oklahoma, and authorizing the employment of a Territorial veterinary surgeon by the board of regents of the Agricultural and Mechanical College of Oklahoma, and creating a sanitary commission and prescribing the duties thereof, and repealing article 1, of chapter 2, of the statutes of Oklahoma.

Be it enacted by the Legislative Assembly of the Territory of Oklahoma:

Object of college. SECTION 1. That section 5, of chapter 1, of the statutes of the Territory of Oklahoma be, and the same is hereby, amended to read as follows: (Section 5.) The leading objects of said college shall be to give instruction in agriculture, in mechanical arts, the English language, veterinary surgery, and the various branches of mathematical, physical, natural,

and economic sciences with special reference to their application in the industries of life; and to that end there shall be established a sufficient number of professorships for teaching the above branches, including military tactics, and such arts and sciences as are related thereto; which professorships shall be filled by able and efficient persons, aided by such assistants and instructors as shall from time to time be necessary.

Appointment of inspector and veterinary surgeon.

SEC. 2. The board of regents in control of the Agricultural College of the Territory of Oklahoma shall employ a veterinary surgeon to aid and assist in developing and protecting the live-stock interests of the Territory of Oklahoma, and may appoint an inspector during the months of June, J. ly, August, September, and October of each year, to protect the United States and Territorial quarantine line, and [to perform] such other duties as may be required of him by the veterinary surgeon for the protection of the live-stock interests of said Territory. Such inspector shall receive as compensation for his services a sum not exceeding five dollars per day, and his necessary traveling and incidental expenses for said inspection, which sum shall be paid in the same manner as provided for the payment for the veterinary surgeon in this act. Said veterinary surgeon shall be a graduate of some reputable and recognized veterinary college or school, and shall give to the board of regents, before his employment, good evidence of a recognized, practical, and scientific knowledge of contagious and infectious diseases of live stock, and shall hold his office unless removed by said board of regents for cause.

Bond; duty. SEC. 3. Said veterinary shall, before entering upon the discharge of his duty, file with the said board of regents his oath of office, with a satisfactory and sufficient bond for the faithful performance of his duty, and for security for the public funds that he may in any way dispose of or draw upon. Said veterinary surgeon shall reside at or near the Agricultural College farm of the Territory of Oklahoma, and shall have his office in one of the buildings of said college, and when not engaged as otherwise provided in this article, he shall devote his time to the investigation of the nature, causes of and remedy for diseases of horses, mules, cattle, swine, and other domestic animals, and shall teach the knowledge thus obtained to the students of said Agricultural College.

Privilege of freeholders. SEC. 4. It shall be lawful for any freeholder, resident of this Territory, to go before any clerk of a court of record, justice of the peace, or notary public and demand the presence and services of said veterinary surgeon in the following manner:

TERRITORY OF OKLAHOMA, county of —, ss:

To the Territorial veterinary surgeon, Territorial Agricultural College, —, Oklahoma.

The undersigned citizen and freeholder of the county of — believes that there exists in this locality a dangerous infectious disease among (here name the kind of stock, the name in full of the party owning the same, or in charge thereof, the part of the county in which it is situated, together with the nearest railroad station and post-office address, and full directions as to the best and most expeditious way for the veterinary surgeon to reach said stock), therefore do request the presence of the Territorial veterinary surgeon.

— [SEAL.]

Which petition shall be certified to in the following manner:

TERRITORY OF OKLAHOMA, county of —, ss:

I hereby certify that the above-named petitioner is known to me to be a reputable citizen of this county.

(Signed by the clerk of the court or justice of the peace, and attested by his official signature, giving the day of the month and the year.)

Aid and instructions. SEC. 5. Such petition may be forwarded, by mail or otherwise as the petitioner may elect, to the Territorial veterinary surgeon, at the Territorial Agricultural College, who shall, as early as possible after the receipt of the same, go to the locality named and give such aid and instructions as he may think best for the prevention or cure of the disease with which he may find said stock affected, and request the petitioner to report to him in writing the result of the treatment prescribed.

Investigations. SEC. 6. Said veterinary surgeon may also, on receiving information satisfactory to himself, visit any locality in this Territory, without receiving any petition as provided for in the preceding sections, where he may think his presence necessary to the protection of the live stock of this Territory, and make a thorough investigation as to the health and condition of the live stock in that locality.

Quarantine. SEC. 7. If upon investigation said veterinary surgeon shall be satisfied that said live stock is suffering from, or infected or capable of infecting with or causing, what is known as glanders and farcy, contagious pleuro-pneumonia, Texas fever, foot-and-mouth disease, rinderpest, or any other dangerous disease of a contagious, infectious, or spreading character, against which he may think it best to quarantine, he shall thereupon make out in writing a notice, delivered to the owner or person or persons in charge of said stock, setting forth the number and kind of stock so diseased, with the nature and character of the disease, with a peremptory order that said live stock shall not be moved from the locality where found, or where placed by his (the veterinary surgeon's) order, until the arrival of the sheriff as hereinafter provided. He shall also immediately notify the probate judge of the county in which said diseased stock may be found, setting forth in writing the number and kind of stock affected or infected, the character and type of the disease, with the name of the person or persons in charge of said stock. Said judge shall thereupon issue an order, in writing, commanding the sheriff to at once proceed to the locality where the diseased stock may be, and compel the owner or other person in whose possession such diseased stock may be found to immediately quarantine the same by placing it in pens, barns, or sheds, completely separated from any other susceptible stock not so diseased or infected, until such diseased stock shall be disinfected or completely recovered, or shall have been killed or disposed of as hereinafter provided; and the pens or sheds containing the diseased stock shall be surrounded with a good and sufficient fence to prevent any other stock from approaching nearer than one hundred feet to the barn or pen containing such diseased stock, unless said veterinary surgeon is satisfied that it is impracticable to quarantine as herein set forth. Then he shall prescribe, in writing, such other rules and regulations as he may deem best, and shall forward to the judge of the court aforesaid a notice of the change in the manner of quarantine, together with a copy of the rules substituted therefor, which substituted rules shall, by the judge aforesaid, be delivered to the sheriff for his guidance and direction in the enforcement of this law. Said veterinary surgeon may, in his discretion, order owner or owners or person or persons in charge to bury or burn carcasses of dead animals, and such persons thereupon shall execute such order as prescribed.

Disinfection. SEC. 8. Whenever the Territorial veterinary surgeon shall have sufficient evidence to satisfy him that any private, public, or corporate barn, or shed, or stock car, or any pen, yard, or field is infected and so injudiciously used as to be liable to convey contagious or infectious disease to live stock, he shall prescribe, in writing, to the owner or owners, or person or persons in charge thereof, the most rapid of the effective modes of disinfecting and cleansing deemed necessary, and shall prohibit, also in writing, to the owner or owners, or person or persons in charge, the occupation by susceptible live stock, or the removal of such infected property as may be movable, until such disinfection has been thoroughly carried out, that the dangers of conveying contagious or infectious disease is removed. Such cleansing and disinfection shall be at the cost of the owner or owners. The Territorial veterinary surgeon may call for help on the probate court, if necessary, and the court shall thereupon order the sheriff or other officer to give the assistance necessary to enforce the law.

Rules and regulations. SEC. 9. The governor of Oklahoma may, in his discretion, order said veterinary surgeon to visit any State or Territory, and investigate any dangerous or infectious disease said to exist in any designated locality in the State or Territory named, and to report to the governor the result of said investigation, together with such suggestions as he may deem proper and right. On receipt of such report, or any official report of the Territorial veterinarian, the governor may call the board of regents of the Agricultural College and the veterinary surgeon together, and that body and said veterinary surgeon may, if deemed wise, arrange and adjust such rules and regulations as safety may demand for the transportation of live stock through or into this Territory, or any foreign country or parts thereof, where dangerous, contagious, or infectious diseases may exist. Such rules and regulations shall not be in contradiction to constitutional laws of transportation and commerce, and shall be subject to the approval of the governor. The governor, on the approval of such rules and regulations, shall issue his proclamation, scheduling and quarantining against such localities in which domestic animals may be considered as capable of conveying infectious or contagious diseases, and prohibit the importation and the unloading in the Territory of any live stock of the kind capable of causing such disease, except under the aforesaid rules and regulations. Such rules and regulations, after approval by the governor, shall be sent to all corporations or other agencies

doing the business of transportation or conveying live stock through or into the Territory of Oklahoma; and any corporation or agency or individuals who shall violate such rules and regulations by transporting prohibited animals shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be fined not less than one thousand nor more than ten thousand dollars for each and every offense, and shall be liable for any and all damages or loss that may be sustained by any party or parties by reason of such importation or transportation. Such penalty shall be recovered in any county in this Territory into or through which such stock is brought, upon information filed in the district court of any such county.

Rules and regulations. SEC. 10. The governor, when informed by the Territorial veterinarian that either contagious pleuro-pneumonia, rinderpest, foot-and-mouth disease, Texas, splenic, or Spanish fever, or *maladie du coït*, has become largely disseminated or epidemic among domestic animals throughout any municipality or geographical district within this Territory, may call the board of regents of the Agricultural College and the Territorial veterinarian together, and said board and veterinary surgeon shall, if deemed necessary to prevent the spread of such disease, formulate, for the said veterinary surgeon and probate courts, rules and regulations under which stock capable of conveying the said disease shall be permitted to move to other parts of the Territory. Such rules and regulations shall be subject to the approval of the governor, who thereupon shall issue his proclamation, scheduling and quarantining such localities and forbidding the conveying or transportation or moving of all domestic animals of the kind diseased from such district to another or from one premise to another, or over any public highway or any lot or ground not sufficiently fenced to prevent animals from going through or from being brought into such infected districts, except in accordance with the aforesaid rules and regulations. The probate court of the county in which such infected locality or district shall have been quarantined by the governor shall be notified by the Territorial veterinarian surgeon and furnished with copies of said regulations. Said probate court shall thereupon comply with said rules and regulations, and issue orders to the sheriff to assist said veterinary surgeon in carrying out the provisions of this act.

Penalty. SEC. 11. Any person or persons who shall in any way interfere with or obstruct said veterinary surgeon in the discharge of his duty, or any owner or owners, person or persons, who shall be notified to quarantine the same as provided in this article, and who shall violate any of the provisions thereof, or any person or persons who shall violate any of the provisions of this article, regarding district or municipality quarantine, shall be deemed guilty of a misdemeanor and punished by a fine not less than fifty nor more than five hundred dollars, or by imprisonment in the county jail not less than one month nor more than one year.

Fines. SEC. 12. All fines recovered under the provisions of this article shall be paid into the county treasury of the county in which the suit is tried by the person collecting the same in the manner now provided by law; and it shall be the duty of county attorneys in their respective counties to prosecute for all violations of this article.

Report of veterinary surgeon. SEC. 13. Said veterinary surgeon shall report to the board of regents of the Agricultural College, in writing, at least once every three months, setting forth the locality or localities visited, as provided in the preceding sections, the kind of stock treated, the type and character of the disease, the remedies prescribed, and the results, as far as known, of such treatment. The board of regents of the Agricultural College shall, from time to time, as often as may be required, select from said reports and publish in a concise form such information as they may think valuable to the people of Oklahoma. This information may be published in connection with the reports relating to agriculture, or in separate bulletins.

Duty of veterinary surgeon. SEC. 14. It shall be the duty of the Territorial veterinary surgeon to collate and compile, briefly and concisely, the useful and interesting information derived from the veterinary sanitary service, as provided for in this article, and report to the general assembly within ten days of the date of the meeting thereof, together with such suggestions as may be beneficial to the agricultural interests of the Territory.

Compensation of sheriff. SEC. 15. The sheriff shall receive for his services under this article such compensation as is now provided by law for similar labor and be allowed by the probate court and paid out of the county treasury of county in which said diseased stock shall be found.

Assistants to veterinary surgeon. SEC. 16. The said Territorial veterinary surgeon may employ help for clerical work, and nonprofessional men as agents or inspectors whenever such means shall become absolutely necessary to carry out the law properly, or enforce the regulations and quarantine as possible in cases of emergency provided against by sections 9 and 10 of this article.

Salary and expenses. SEC. 17. The Territorial veterinary surgeon, being under this law continued as an instructor in veterinary science as well as an expert for the Territory, shall receive for his services such sum per annum as shall be fixed by the board of regents of the Agricultural College, payable at such time as said board may direct, out of the funds provided for the maintenance of the Agricultural College, as other professors in said institution, and shall receive, further, the expenses of traveling and incidental expenses necessarily incurred in the discharge of his duty, payable by said board of regents out of appropriations made in connection with this article. Said veterinary surgeon shall render account to said board of regents for the number of miles traveled by himself, the help employed and cost thereof, and all incidental expenses incurred in working under this law. Said account or accounts shall be audited, and, if found correct, shall be allowed as hereinafter provided.

Appropriation. SEC. 18. For the purpose of putting said law in effect, the sum of five hundred dollars per annum for the years 1895 and 1896, or so much thereof as is necessary, is hereby appropriated for the purpose of carrying said law into effect.

Restriction of animals; penalty. SEC. 19. No person or persons shall, between the first day of February and the first day of December of any year, drive or cause to be driven into or through any county or part thereof in this Territory, or turn upon or cause to be turned or kept upon any highway, range, common, or pasture within this Territory, except that portion of this Territory quarantined against by this act, any cattle capable of communicating or liable to impart what is known as Texas, splenic, or Spanish fever. Any person violating any provisions of this act shall, upon conviction thereof, be adjudged guilty of a misdemeanor, and shall for each offense be fined not less than five hundred dollars nor more than two thousand dollars, or be imprisoned in the county jail not less than thirty days and not more than one year, or by both such fine and imprisonment: *Provided*, That nothing herein shall be construed to prevent or make unlawful the transportation of such cattle through this Territory on railways or having in possession between the first day of November and the first day of April following.

Quarantine; compensation. SEC. 20. Whenever the governor, board of regents, and veterinary surgeon shall determine that certain cattle within this Territory are capable of communicating or liable of imparting Texas, splenic, or Spanish fever, they shall issue their orders as hereinbefore provided, to the probate judge of the county where said disease exists, who shall direct the sheriff to take and keep such cattle in his custody, subject to such quarantine regulations as shall be prescribed, until the first day of December next ensuing, on which date they shall direct such officers to deliver said cattle to their owner or owners, or his or their agent. Before any cattle so held shall be delivered as aforesaid, there shall be paid to the officer having said cattle in custody all the costs and expenses of taking, detaining, and holding such cattle; and in case such costs and expenses are not so paid on the said first day of December, the said officer shall advertise, in the same manner as is by law provided in cases of sales of personal property on execution, that he will sell such cattle, or such portions thereof as may be necessary to pay such costs and expenses and the expenses of sale, and shall forthwith pay over to the probate court any amount so received in excess of the legal fees and expenses of such officer. And any officer performing any of the duties enjoined in this section or in the next preceding section of this act shall receive the same compensation therefor as is prescribed by law for similar services.

Liability. SEC. 21. Any person or persons who shall drive, ship, or transport, or cause to be shipped, driven, or transported, into or through any county in this Territory, any cattle liable or capable of communicating Texas, splenic, or Spanish fever to any domestic cattle of this Territory, shall be liable to any person or persons injured thereby for all damages that they may sustain by the reason of the communication of said disease, or Texas, splenic, or Spanish fever, to be recovered in a civil action in any court of competent jurisdiction; and the parties so injured shall have a first and prior lien to all other liens for such

damages on the cattle communicating the disease of Texas, splenic, or Spanish fever.

Legal procedure. SEC. 22. In the trial of any person charged with the violation of any of the provisions of this act, and in the trial of any civil action brought to recover damages for the communication of Texas, splenic, or Spanish fever, proof that the cattle which such person or persons are charged with shipping, driving, or keeping, or which are claimed to have communicated the said diseases, were brought into the Territory from east and south of lines hereinafter described, shall be taken as *prima facie* evidence that such cattle were, between the first day of February and the first day of December in the year in which the offense was committed, capable of communicating and liable to impart Texas, splenic, or Spanish fever, within the meaning of this act, and the owner or owners or person or persons in charge of said cattle had full knowledge and notice thereof. If the owner or owners or person or persons in charge of said cattle shall show to the satisfaction of the veterinary surgeon and board of regents of the Agricultural College that the said cattle had been kept, since the first day of December of the previous year, north and west of the quarantine lines of this Territory, this section shall not apply thereto.

Quarantine lines. SEC. 23. That the quarantine lines of this Territory are established on the following lines, to wit: Commencing at a point where the Arkansas River crosses the Kansas State line; thence south along the Arkansas River to the northeast corner of the Ponca Reservation; thence west along the north boundary line of the Ponca Reservation to the Indian meridian; thence south on said Indian meridian to the southwest corner of the Otoe and Missouri Reservation; thence east on a line between Noble County and said reservation to the southeast corner of said reservation; thence north on a line between said reservation and Pawnee County to the Arkansas River; thence down said river to the north boundary line of the Creek Nation; thence west along the line between the Creek Nation and Oklahoma Territory to the northwest corner of the Creek Nation; thence south on a line between the Creek Nation and Oklahoma Territory to the north fork of the Canadian River; thence west along the meanders of said river to the northwest corner of the Seminole Nation; thence south on the boundary line between Oklahoma Territory and said Seminole Nation to the South Canadian River; thence up along the meanders of said river to the northwest corner of the Wichita Reservation; thence south on a line between Oklahoma Territory and the Wichita Reservation to the Washita River; thence west along the Washita River to a point where the southern boundary line of Washita County intersects said river; thence west along the line between Washita County and Kiowa and Comanche Reservation to the north fork of the Red River; thence up along said river to the one hundredth meridian; thence south and southwest along the line established by the United States quarantine.

SEC. 24. That all of article 1, of chapter 2, of the statutes of Oklahoma is hereby repealed.

SEC. 25. This act shall be in force and effect from and after its passage and approval.

Approved March 8, 1895.

AN ACT to provide for the protection of domestic animals, for the creation of a live-stock sanitary commission, rules and regulations, to provide penalties for violation of the same, and to repeal chapter 59 of the Session Laws of the Territory of Oklahoma for the year 1895.

Be it enacted by the Legislative Assembly of the Territory of Oklahoma:

Live-stock sanitary commission. SECTION 1. That the Agricultural and Mechanical College Board of Regents of the Territory of Oklahoma be, and the same are hereby constituted *ex officio*, the live-stock sanitary commission of the Territory of Oklahoma. Whenever a vacancy in the membership of the Agricultural and Mechanical College Board of Regents shall occur by reason of death, resignation, expiration of term of, or removal from office, the person selected and appointed by the governor to fill said vacancy shall, upon qualifying as a member thereof, and during his term of office as such, be *ex officio* a member of the live-stock sanitary commission of the Territory of Oklahoma. The chairman of said board of regents shall be chairman of said commission, and one of the members thereof shall be selected as secretary of said commission to act when sitting as such.

Powers; meetings; compensation. SEC. 2. A majority of the members of said commission shall constitute a quorum for the transaction of business, and shall have power while in session as an Agricultural

tural and Mechanical College Board of Regents to transact any business before them within the provisions of this act, and, in addition thereto, to hold meetings at any place within the Territory of Oklahoma, under the call of the chairman thereof: *Provided, however,* That in addition to the time allowed by law for meetings as the Agricultural and Mechanical College Board of Regents, said commission may meet at various times, not to exceed twelve days in any one year, and shall receive as compensation when meeting as said live-stock sanitary commission alone, five dollars per day and five cents per mile for every mile necessarily traveled in attending said meeting, to be paid out of the Territorial treasury upon warrants drawn by the Territorial auditor on the vouchers of said board.

Duties of commission. SEC. 3. It shall be the duty of the commission provided for in the first section of this act to protect as far as practicable the live stock of this Territory from all contagious or infectious diseases of a malignant character, whether said disease exists in this Territory or elsewhere; and for this purpose they are hereby authorized and empowered to establish, maintain, and enforce such quarantine lines and lines established by law and to make sanitary rules and regulations as they may deem necessary, and to provide rules and regulations for the enforcement and execution of the same, and to prevent the importation and exportation of diseased live stock and the spread of infectious or contagious diseases among domestic animals. It shall also be the duty of said commission to cooperate with the live-stock sanitary commissioners, boards, and officers of other States and Territories and with the United States Secretary of Agriculture in establishing such quarantine lines, rules, and regulations as shall in their judgment best protect the live-stock industry of this Territory against contagious or infectious diseases of a malignant character; said rules to be uniform with those of the Secretary of Agriculture of the United States in regard to the prohibited period, when it shall be unlawful to cross the quarantine lines established by the Secretary of Agriculture and by this act; and they are hereby empowered and authorized to make a thorough investigation as to the best manner of disinfecting animals, pens, shipping pens, and railway cars that are liable to communicate or convey contagious or infectious diseases of a malignant character to live stock, and to adopt such rules and regulations to enforce their disinfection as they may deem necessary. That the quarantine line

Quarantine line established. of the Territory of Oklahoma is established as follows, to wit: Commencing at a point where the Arkansas River crosses the Kansas State line; thence south, along the Arkansas River, to the northeast corner of the Ponca Reservation; thence west, along the north boundary line of the Ponca Reservation, to the Indian meridian; thence south on said Indian meridian to the southwest corner of the Otoe and Missouri Reservation; thence east, on a line between Noble County and said reservation, to the southeast corner of said reservation; thence north, on a line between said reservation and Pawnee County, to the Arkansas River; thence down said river to the north boundary line of the Creek Nation; thence west, along the line between the Creek Nation and the Territory of Oklahoma, to the northwest corner of the Creek Nation; thence south, on a line between the Creek Nation and the Territory of Oklahoma, to the north fork of the Canadian River; thence west, along the meanders of said river, to the northwest corner of the Seminole Nation; thence south, on the boundary line between the Territory of Oklahoma and said Seminole Nation, to the South Canadian River; thence up along the meanders of said river to the northeast corner of the Wichita Reservation; thence up said river to the northwest corner of the Wichita Reservation; thence south, along a line between the Wichita Reservation and Custer County and Washita County, to the southeast corner of Washita County; thence west, along the line between Washita County and the Kiowa and Comanche Reservation, to the north fork of the Red River; thence down and along said north fork of the Red River to a point of confluence with the Red River; thence up said Red River to a point where said Red River is intersected by the United States quarantine line.

Governor to issue proclamation. SEC. 4. When said commission shall have determined quarantine lines and made rules and regulations to maintain and enforce the same to prevent the communicating or conveying of contagious or infectious diseases of a malignant character to live stock within this Territory as heretofore provided, the governor of the Territory of Oklahoma, whenever advised and directed by said commission, shall issue his proclamation setting forth and proclaiming the boundary and location of said quarantine line or lines, the orders, rules, and regulations so prescribed by said commission; and the issuance of said proclamation shall be due and public notice of its provisions, and no further notice or publication of the same shall be necessary.

Three districts and three inspectors. SEC. 5. The said live-stock sanitary commission shall divide the Territory of Oklahoma into three separate districts and define the boundaries thereof, and shall assign the inspectors appointed under this act, one to each respective district. Said inspectors shall have power to act throughout the Territory, and it shall be their duty to communicate any information or aid in any manner the inspectors of the other districts in the performance of their duties. Each inspector shall have a fixed or permanent address within his district, which said address, together with the boundaries of his district and the full name of the inspectors, shall be published in the proclamation of the governor as hereinbefore provided.

Appointment of inspectors; powers; compensation.

SEC. 6. There shall be appointed by said commission three live-stock inspectors, one of same from each one of the three political parties of this Territory, one to be a Democrat, one a member of the Peoples' Party, or Populist, and one a Republican, and should the place of any inspector be made vacant by death, resignation, or otherwise, his successor shall be appointed from the same political party of which he was a member. They shall be qualified and learned in the diseases of domestic animals, and shall first pass satisfactory examination before said commission. Said inspectors shall act under the orders and instructions of said commission, and shall [have] full power to execute the orders thereof and to do all things necessary to the enforcement and execution of the rules and regulations thereof, and the rules of the Secretary of Agriculture of the United States. They shall hold their office for the period of two years from the date of appointment, and subscribe to the oath of office and give bond to the Territory of Oklahoma in the sum of one thousand dollars each for the faithful performance of all duties enjoined upon them by law or the live-stock sanitary commission. Said inspectors shall render all reports and accounts to said commission, and shall receive three dollars per day for the time employed in the discharge of their duties, and five hundred dollars a year, and no more, or so much thereof as is necessary, for actual expenses incurred in the discharge of their duties, which said salary and expenses shall be paid out of the treasury of the Territory of Oklahoma on auditor's warrants issued upon the vouchers of said commission.

Powers of inspectors; penalty.

SEC. 7. The inspectors appointed and acting under the provisions of this act shall have power to enter upon any premises, or into any barn, lot, corral, shed, or pasture for the purpose of inspecting or disinfection. If, upon examination, he is satisfied that said premises, barn, lot, corral, shed, or pasture is infected with any contagious or infectious disease of a malignant character, or needs disinfecting, he shall possess himself thereof, and may exclude any and all persons from interference with his possession thereof, and establish such rules and regulations as he may deem necessary until he shall be satisfied that the same is free from such infection. Any person or persons who shall interfere with said inspector's possession of said premises, barn, lot, corral, shed, or pasture, or violate any of the rules and regulations made by him for the protection or disinfection of same, while the same is under his control or possession, shall be guilty of a misdemeanor, as provided in section 13 of this act.

Duties of inspectors.

SEC. 8. It shall be the duty of the inspectors, under this act, to enforce all the provisions of this act and the rules and regulations of the live-stock sanitary commission, and the rules and regulations of the Department of Agriculture of the United States thereunder. Whenever notified by the sheriff or any person that any live stock, pastures, barns, lots, corrals, sheds, or range are affected or infected with any contagious or infectious diseases of a malignant character, he shall at once proceed to the inspection of said live stock, pastures, barns, lots, corrals, sheds, or range, and if he shall consider the same affected or infected, shall immediately establish rules and regulations governing the movement of said live stock, or possession and use of said pastures, barns, lots, corrals, sheds, or range, or of the disinfection thereof, and, if necessary, shall place the same in possession of and under control of the sheriff, if he be not already in control.

To seize live stock, when; disposition; penalty.

SEC. 9. If any live stock shall be led, drifted, driven, or transported across any quarantine line established by the Department of Agriculture of the United States, the live-stock sanitary commission of the Territory of Oklahoma, the quarantine line in the Territory of Oklahoma as herein established, or of the live-stock inspectors, into or upon any part of the Territory of Oklahoma protected by said quarantine lines during the prohibited period as prescribed by the live-stock sanitary commission or its inspectors, or the

laws of Congress and the Territory of Oklahoma, and the proclamation issued under authority thereof, the inspectors shall have the power to seize said live stock, and may call to their aid the sheriff of the county where said live stock is found, and shall either place same under quarantine regulations, or to return said live stock back across said line into the Territory from whence they came, and the costs and charges of the sheriff, which shall be the same as in the case of personal property taken under execution, shall be a lien upon said live stock, and he may sell all or a part thereof to pay the same, as provided in section 10 of this act, and the person or persons who shall be in charge of said live stock, or shall have the same in their possession, shall be deemed guilty of a misdemeanor, and upon conviction shall be punished as provided in section 13 of this act.

Sheriff to restrain live stock having infectious disease.

otherwise having notice or knowledge, that there is within the county where the officer resides live stock believed to be affected or infected with a contagious or infectious disease of a malignant character and liable to communicate or convey the same to any live stock, or that any live stock has been driven, led, moved, shipped, or drifted, or in any manner transported into or through any portion of this Territory in violation of any rules, regulations, or orders of the live-stock sanitary commission, he shall immediately take charge of and restrain said live stock under such temporary regulations as will prevent the communicating or conveying of said disease, and he shall immediately notify the live-stock inspector of his district; and said sheriff shall keep said stock in his custody until the arrival of the live-stock inspector, who shall immediately take such steps as he may deem necessary for the protection of the live-stock interests of that locality. All live stock

Disposition of live stock seized; payment of expenses.

from said live-stock inspector, unless he shall receive further orders from the said live-stock inspector to deliver said live stock to the owner or owners. No officer who shall take or detain any live stock under the provisions of this act shall be liable to the owner or owners of such live stock for any damage by reason of such taking or detention, or by reason of the performance of any other duty enjoined in this act. Before any live stock shall be delivered as aforesaid there shall be paid to the officer having said live stock in custody all costs and expenses of taking, detaining, or holding, or disinfecting, and in case such costs and expenses are not paid said officer shall advertise in the same manner as provided by law in cases of the taking, caring for, and sale of personal property upon execution; and he may sell such live stock or such portion thereof as may be necessary to pay his costs and expenses of sale, and he shall forthwith pay over to the owner or owners any amount so received in excess of the legal fees and expenses of such officer.

Penalty. SEC. 11. Any person, persons, or corporation who shall drive, lead, move, drift, ship, transport, or cause to be driven, led, moved, drifted, shipped, or transported, into or through any county or part thereof in this Territory within the area protected by and included within quarantine or boundary lines described by the live-stock sanitary commission, or one of the inspectors appointed thereby, any live stock affected or infected with a contagious or infectious disease of a malignant character, and liable to communicate or convey such disease to live stock within said area, shall be guilty of a misdemeanor, and upon conviction thereof shall be fined in the sum of not less than one hundred dollars nor more than five thousand dollars, and may be imprisoned in the county jail not less than thirty days nor more than one year, or may be punished by both such fine and imprisonment, and in addition thereto shall be liable to any person or persons injured thereby for all damages they may sustain by reason of the communicating or conveying of such disease, to be recovered in a civil action in any court of competent jurisdiction, and the party so injured shall have a first and prior lien to all other liens for such damages upon the live stock communicating or conveying such disease: *Provided, however,* That nothing in this act shall be construed to affect the laws of Congress governing interstate commerce.

Duties of railways; penalty. SEC. 12. It shall be the duty of the railway corporations doing business in this Territory, and they are hereby required, to disinfect the shipping pens and cars used by them in transporting live stock in or through this Territory, in such manner and at such times and places as the said commission may order and designate; and any such corporation violating any of the provisions of this section shall be liable to a penalty of not less than one hundred dollars and not more than five thousand dollars for each

violation of any of said regulations or rules of said commission, to be recovered in a civil action to be prosecuted by the attorney-general or under his direction, in the name of the Territory of Oklahoma, in the district court of Logan County, Territory of Oklahoma, or any county where such violation may have occurred.

Penalty. SEC. 13. Any person or corporation who shall, in violation of any of the rules, regulations, orders, or directions of the live-stock sanitary commission, or any of its live-stock inspectors, fixing, establishing, or maintaining quarantine lines, or local quarantine rules and regulations within this Territory against contagious or infectious diseases of a malignant character, drive, lead, move, drift, ship, or in any manner transport any live stock across said lines, or any of them, or violate any local quarantine rules and regulations, or in any manner interfere, interrupt, or obstruct the live-stock sanitary commission, or any of its live-stock inspectors, in the discharge of their duty, shall be guilty of a misdemeanor, and shall, for each offense, upon conviction, be fined in the sum of not less than one hundred dollars nor more than one thousand dollars, or be imprisoned in the county jail for not less than thirty days nor more than one year, or may be punished by both such fine and imprisonment, and shall be liable in a civil action for all damages caused by violation of this act.

Payment for animals killed. SEC. 14. Whenever any live stock within this Territory shall be found by the live-stock inspectors to be affected with rinderpest, foot-and-mouth disease, glanders, *maladie du coït*, or contagious pleuro-pneumonia, he shall summon three disinterested householders and cause said stock so affected to be appraised, which appraisement shall be upon the value of the stock at that time. He shall then kill said stock and dispose of the carcasses thereof in such manner as will in his judgment best protect the health of the domestic animals of that locality. The inspector shall forward his report of animals killed, disease with which affected, name of owner, and the appraiser's certificate, to the secretary of the live-stock sanitary commission. The said commission shall audit the account, if correct, and forward the voucher to the auditor of the Territory, who shall draw his warrant upon the Territorial treasurer for the amount, and who shall pay the same out of the general funds of said Territory: *Provided, however,* That if said stock contracted the disease from without the Territory, or if the owner thereof has violated any quarantine regulations of the Territory, or of the United States Government, or if he became the owner thereof with the knowledge that said stock was affected with said disease, the Territory shall not be liable for the value thereof.

County attorney shall prosecute; compensation. SEC. 15. It shall be the duty of the county attorney of the proper county to prosecute, on behalf of the Territory, all criminal cases arising under this act. For each conviction of an offense under this act said county attorney shall receive, in addition to his salary already provided, the sum of twenty-five dollars, to be taxed as costs in the case.

Inspectors to keep record book. SEC. 16. It shall be the duty of the inspectors provided for by this act to provide themselves with record books, in which they shall record age, brand, and color of all cattle slaughtered within their respective districts for the purpose of sale to the public, either wholesale or retail; and to appoint in each county of his district one or more deputies for the purpose of inspecting animals for slaughter, as provided for by this act, whenever he shall be requested to so appoint by a petition in writing signed by fifty qualified voters of said county. It shall be the duty of all persons slaughtering cattle for public sale and use to notify the inspector of the district, or his local deputy appointed by him for that purpose, of their intention so to do. The inspector or his deputy shall at once proceed to inspect said cattle, and if he shall find that they are affected or infected with any disease which will render them unfit for human food he shall inform the person not to slaughter the same, but should said cattle be found to be free from all disease, then he shall record the color, age, and brand of same, and said cattle shall be considered fit for slaughter and sale. Any person offering

Appointment of deputy inspectors; duties. the meat of cattle for sale without having them inspected as aforesaid shall be deemed guilty of a misdemeanor, and upon conviction thereof be fined ten dollars for every animal so unlawfully slaughtered. The inspectors or their deputies shall be entitled to a fee of twenty-five cents for each head of cattle inspected, to be paid by the person having the same done.

Weekly report to be made. SEC. 17. It is hereby made the duty of all inspectors in this Territory at the end of each week to transmit to the secretary of the live-stock sanitary commission a report showing in detail the number of animals inspected by him or his deputies during the week, the number rejected as being unfit for human food, with recommendations as to the disposition to be made of the same, the number of animals recommended as fit for slaughter, with a complete description of the marks and brands on each animal inspected, giving location of the same, and to give the person slaughtering the animal a duly certified health certificate, with the description of the animal or animals found to be fit for human food, the certificate to contain all marks and brands upon said animal or animals.

Duties of sheriffs and district judges. SEC. 18. It is hereby made the duty of all sheriffs in this Territory to at once make known to the county attorneys, and to the grand juries of their respective counties, any and all violations of any of the provisions of this act which may come to their knowledge, and to said live-stock inspectors and other proper authorities of this Territory in the enforcement of the rules and regulations and orders of said commission and inspectors, and of any and all the provisions of this act, and all district judges are hereby required to give this act in charge to the grand juries of their respective counties at each term of the courts thereof.

Prosecution, where. SEC. 19. Any person who violates any of the provisions of this act as hereinbefore mentioned, may be prosecuted in the county of his residence, or in any county in this Territory in which he may be found, or in any county in which any live stock owned or controlled by him may be found in violation of any of the provisions of this act, or in any county in which any violation of any provision of this act may be committed by him.

Penalty. SEC. 20. Except as otherwise provided for in this act, any person who shall violate, disregard, or evade, or attempt to violate, disregard, or evade any of the provisions of this act, or who shall violate, disregard, or evade, or attempt to violate, disregard, or evade, any of the rules, regulations, directions, or orders of the live-stock sanitary commission, or any of its live-stock inspectors, shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be fined in the sum of not less than one hundred nor more than five thousand dollars, or be imprisoned in the county jail for not less than thirty days, nor more than one year, or may be punished by both such fine and imprisonment.

SEC. 21. That all of chapter 50 of the session laws of the Territory of Oklahoma, for the year 1895, is hereby repealed.

SEC. 22. This act shall be in force and effect from and after its passage and approval.

Approved March 9, 1897.

OHIO.

AN ACT to amend and supplement section 6928 of the Revised Statutes of Ohio, providing against the sale of unwholesome food (29, v. 144), and to provide against the contamination of animals used for human food.

Be it enacted by the General Assembly of the State of Ohio:

SECTION 1. That section 6928 of the Revised Statutes be amended and supplemented to read as follows:

Disposition of animals; penalty. SEC. 6928. Whoever sells, or offers for sale, or has in his possession, with a view to sell, any kind of diseased, corrupted, adulterated, or unwholesome provisions, whether for meat or drink, without making the condition of the same known to the buyer, and whoever kills for the purpose of sale, any calf less than four weeks old, or sells, or has in possession with intent to sell, the meat of any calf which he knows to have been killed when less than four weeks old, shall be fined not more than fifty dollars, or imprisoned twenty days, or both.

Penalty for imposition. SEC. 6928-1. Whoever feeds to swine, or animals of any kind used for human food, the flesh of any old horse, or the flesh of any animal which has become old, decrepit, infirm, or sick, or of one that has died from such cause, or any offal or flesh that is putrid or unwholesome, shall be fined not more than two hundred dollars nor less than fifty,

or imprisoned for the first offense not more than thirty days, or both, and for a second offense not more than six months, or both.

SEC. 2. Original section 6928 is hereby repealed and this act shall be in force from and after its passage.

Passed March 30, 1896.

AN ACT to prohibit the transportation within this State of hogs infected with cholera.

Be it enacted by the General Assembly of the State of Ohio:

Transportation. SECTION 1. That from and after the passage of this act it shall be unlawful for any person or persons owning or having charge of any hog or hogs infected with cholera to transport the same within the borders of this State.

Penalty. SEC. 2. Any person or persons violating the provisions of this act shall be liable for all damages resulting from the introduction of such disease thereby, to be recovered by any person so damaged, and shall also be deemed guilty of a misdemeanor, and on conviction thereof shall be fined in any sum not exceeding five hundred dollars, or be imprisoned in the jail of the county not exceeding six months, or both.

Construction of act. SEC. 3. This act shall not be construed so as to affect common carriers or their employees, and shall take effect and be in force from and after its passage.

Passed April 27, 1896.

PENNSYLVANIA.

AN ACT to protect the health of the domestic animals of the Commonwealth of Pennsylvania.

Importation of cattle for breeding purposes prohibited; exceptions. SECTION 1. *Be it enacted, etc.,* That the importation of dairy cows and neat cattle for breeding purposes into the Commonwealth of Pennsylvania is hereby prohibited, excepting when such cows and neat cattle are accompanied by a certificate from an inspector whose competency and reliability are certified to by the authorities charged with the control of the diseases of domestic animals in the State from whence the cattle came, certifying that they have been examined and subjected to the tuberculin test and are free from disease.

Detention of cattle, and examination thereof under State live stock sanitary board. SEC. 2. That in lieu of an inspection certificate as above required, the cattle may be detained at suitable stock yards nearest to the State line on the railroad over which they are shipped, and there examined at the expense of the owner, or cattle as above specified from points outside of the State may, under such restrictions as may be provided by the State live stock sanitary board, be shipped in quarantine to their destination in Pennsylvania, there to remain in quarantine until properly examined at the expense of the owner and released by the State live stock sanitary board.

Powers of said board. SEC. 3. The State live stock sanitary board is hereby authorized and empowered to prohibit the importation of domestic animals into the Commonwealth of Pennsylvania whenever in their judgment such measures may be necessary for the proper protection of the health of the domestic animals of the Commonwealth, and to make and enforce rules and regulations governing such traffic as may from time to time be required.

Violation of act declared a misdemeanor; penalty; liability for damages. SEC. 4. That any person, firm, or corporate body violating the provisions of this act shall be deemed guilty of a misdemeanor and upon conviction shall, in the proper court of the county in which such cattle are sold, offered for sale, delivered to a purchaser, or in which such cattle may be detained in transit, for each offense, forfeit and pay a fine of not less than fifty dollars or more than one hundred dollars, or be punished by imprisonment for not less than ten days and not exceeding thirty days, either or both at the discretion of the court. Such person, firm, or corporate body shall be liable for the full amount of the damages that may result from the violation of this act.

State live stock sanitary board shall enforce act. SEC. 5. The State live stock sanitary board is hereby charged with the enforcement of this act, and is authorized to see that its provisions are obeyed, and to make from time to time such rules and regulations as may be necessary and proper for its enforcement.

SEC. 6. That this act shall go into effect January first, one thousand eight hundred and ninety-eight.

Approved May 26, 1897.

RHODE ISLAND.

AN ACT in amendment of chapter 99 of the General Laws.

It is enacted by the General Assembly as follows:

SECTION 1. Section 13 of chapter 99 of the General Laws is hereby amended to read as follows:

Compensation for slaughtered animals. "SEC. 13. The State shall pay to the owner of any animal killed under the provisions of section 10 of this act one-half of its appraised value; but if upon post-mortem examination it shall be found that the slaughtered animal was not affected by tuberculosis, then the animal so killed shall be paid for at its full appraised value: *Provided*, That the State shall not pay for any diseased animal so killed if the animal has not been owned by some person in the State and found in the State three months previous to the day of slaughter."

Certificate of health. SEC. 2. All persons, corporations, or companies intending to ship, transport, or to drive cattle into the State must produce a certificate to the effect that the cattle to be shipped, transported, or driven are free from tuberculosis as far as may be determined by physical examination and the tuberculin test. The certificate shall give a description of each animal brought into the State sufficiently accurate for identification, and shall give also the date and place of examination of each animal, the preparation of tuberculin used, the quantity injected, the temperature immediately before inoculation, the temperature at the eleventh hour, and every two hours subsequent thereto for at least ten hours or until the reaction is completed. The certificate shall be signed by a veterinarian who is a graduate of a recognized veterinary college, and shall be sent immediately to the secretary of the State board of agriculture, who shall immediately notify a commissioner of the county into which the cattle are to be shipped, transported, or driven, and said commissioner shall examine the cattle to identify them. Failure to comply with the law shall be considered a misdemeanor, punishable by a fine not to exceed one hundred dollars.

Filing of complaints. SEC. 3. Complaints for the violation of the provisions of this chapter shall be made by the secretary of the State board of agriculture, and said secretary shall be exempt from giving security for costs on any complaint made as aforesaid.

SEC. 4. Section 8 of chapter 99 of the General Laws is hereby amended to read as follows:

Appointment of commissioners. "SEC. 8. The board may appoint one or more commissioners in each county of the State, whose duty it shall be to visit and inquire into the condition of any domestic animal in their respective counties whenever there is reason to suspect that any such animal, or the carcass of any such animal, is affected with tuberculosis or other contagious, infectious, or communicable disease; and the commissioners in their respective counties are authorized to quarantine any such animal, or the carcass of any such animal, until inspected by the veterinarian employed by the board."

SEC. 5. This act shall take effect upon its passage, and all acts and parts of acts inconsistent herewith are hereby repealed.

Approved May 15, 1896.

SOUTH DAKOTA.

AN ACT to amend chapter 135 of the laws of 1886 in relation to the inspection of sheep.

Be it enacted by the Legislature of the State of South Dakota:

Appointment of sheep inspector. SEC. 1. That section one, chapter one hundred and thirty-five of the laws of 1886 be amended to read as follows: In every county in this State containing two thou-

and sheep or more, the county commissioners shall appoint a sheep inspector, who shall be selected by the sheep owners of the county at a meeting for that purpose; such inspector shall hold his office for the period of two years, unless removed for cause. Any inspector may act in an adjoining county having no inspector on the request of the commissioners thereof. The meeting mentioned in this section shall be called by the county commissioners, and they shall give notice of such meeting by notice published in a newspaper of the county for two successive weeks prior to the date of the meeting, and the first publication shall be at least twenty days before the day fixed for the meeting, and said notice shall give time and place of holding the same.

Duty of inspectors. SEC. 2. That section two of chapter one hundred and thirty-five of the laws of 1885 be amended to read as follows: It shall be the duty of the sheep inspector whenever he shall have knowledge or information that any sheep within his jurisdiction have the scab or any other malignant contagious disease, to inspect said flock and report in writing the result of his inspection to the county auditor of his county, to be filed by him for reference for the county commissioners or any party concerned, and said inspector shall give to owner or agent directions for treatment, and require from same a report every month thereafter until the inspector is satisfied that the disease is cured, when he shall again inspect the flock and give his certificate of freedom from disease, and make report. The certificate of freedom mentioned in this section shall be a passport for all other counties in the State into which said sheep may be moved.

Restriction of infected animals. SEC. 3. That section four, chapter 135 of the laws of 1885 be amended to read as follows:

The owner of any flock, or his agent in charge thereof, when the same is reported by the inspector to be so diseased shall immediately herd or house the same, or keep in some inclosure so that they can not range upon any ground accustomed to be ranged upon by any other sheep, and shall restrain them from passing over or traveling upon any public highway or road. The owner of such

Treatment. sheep or his agent in charge thereof shall at once follow any directions for treatment prescribed by the inspector and promptly and faithfully carry out the same until a cure is effected, and shall report to the inspector as provided in section 2, chapter 135 of the laws of 1885, being section 2352, compiled laws.

Owner may appeal. In all cases where the owner of sheep or his agent in charge thereof believe themselves wronged by the report or action of the inspector, they may appeal to the veterinarian of the State Agricultural College; such appeal to be made by notice in writing served upon the inspector and upon the county clerk. Within five days after the service of notice on the county clerk he shall forward all papers filed with him and referring to such matter to the said veterinarian aforesaid.

SEC. 4. That section 8, chapter 135 of the laws of 1885 be amended by striking out the words "register of deeds" where they occur in said section, placing the words "county auditor" in place thereof.

Compensation. SEC. 5. That section 9, chapter 135 of the laws of 1885 be amended to read as follows: The inspector shall receive three dollars per day while necessarily employed in inspecting sheep, and all fines and penalties shall be paid to the county treasurer, to be set aside as an inspection fund.

Penalty for false report by inspector. SEC. 6. That section 11, chapter 135 of the laws of 1885 be amended to read as follows: Whenever any sheep inspector shall wilfully and falsely report any sheep to be affected with disease, or wilfully and falsely report any sheep inspected by him free from disease he shall forfeit his office as inspector and shall be subject to a penalty of not less than twenty-five dollars nor more than one hundred dollars.

SEC. 7. That section 14, chapter 135 of the laws of 1885 be amended by striking out the word "fees" wherever the same occurs in said section, and insert in place thereof the word "service."

SEC. 8. All acts and parts of acts inconsistent with this act are hereby repealed.

Approved March 7, 1891.

AN ACT to regulate the shipping of live stock into the State, through the State, and out of the State of South Dakota.

Be it enacted by the Legislature of the State of South Dakota:

No stock to be shipped in; exception. SECTION 1. That no live stock shall be shipped or driven into the State of South Dakota from any part of the infected districts south or east of the quarantine line

as established by the United States Government, or any quarantine line that may be established by the governor of the State, unless such stock is accompanied with a certificate from a United States stock inspector or a State veterinary surgeon that said stock has been inspected by him and has complied with all the conditions of the United States quarantine laws and regulations, and that said stock is free from disease.

Stock to be unloaded in forty-eight hours; exception.

removed from the unloading station in said State within forty-eight hours after unloading the same and driven immediately to their range unless the same is to be re-branded: in that case the owner or owners of said stock shall be granted six hours additional for every two hundred head or fraction thereof so to be branded.

Unload at nearest station to destination, and driven over nearest route.

SEC. 2. That all live stock shipped into the State of South Dakota for the purpose of ranging the same in said State shall be removed from the unloading station in said State within forty-eight hours after unloading the same and driven immediately to their range unless the same is to be re-branded: in that case the owner or owners of said stock shall be granted six hours additional for every two hundred head or fraction thereof so to be branded.

Notice to inspector of shipment.

SEC. 3. That all live stock shipped through the State of South Dakota, and unloaded in said State intended for ranges outside of said State of South Dakota, shall comply with all the requirements of section 2 of this act, and said live stock intended for ranges outside of the State of South Dakota shall be unloaded at the nearest station to destination and immediately driven by the most direct and practicable route to their destination.

Notice of driving.

SEC. 4. That all live stock shipped from the State of South Dakota shall, before being loaded for shipment or driven from said State, be inspected by the State veterinary surgeon of South Dakota or his deputy or other person provided by law for that purpose.

Inspection and record.

SEC. 5. That parties desiring to ship or drive live stock from the State of South Dakota shall give notice in writing to the officer whose duty it is to make such inspection of the date, place, and time of shipment, and the approximate number of stock to be shipped. Such notice shall be given a reasonable time prior to the shipment to allow the officer sufficient time to get to the place described in each [such] notice.

Disposal of stock dying in transit.

SEC. 6. That the veterinary surgeon of the State of South Dakota, his deputy, or other officer appointed for that purpose shall, at the time mentioned in said notice, proceed to the said place of shipment and make an inspection of said stock as to its health. He shall also make a record in a book kept for that purpose of the number of stock, kind of stock, sex and age of stock, together with all marks and brands, name of owner or shipper, date and place of shipment, and the name and address of consignee. If the stock is in healthy condition, he shall issue his certificate to the owner or shipper of said stock, certifying that said stock is in healthy condition, and that said stock has been inspected as required by this act, giving in said certificate also the number, brands, or other marks or descriptions sufficient to identify said stock as recorded, and which certificate and record shall be received in the courts of this State as *prima facie* evidence of the facts therein contained, and shall at all times be open to inspection by the public at the office of the person whose duty it is by law to keep said record in and for the county for which he is appointed.

Penalty.

SEC. 7. That all stock dying in transit or dying on the way from or to the shipping places in any organized county of this State, the owner or owners, carriers or person in charge at the time, shall bury, within twenty-four hours after such deaths have taken place, the carcasses of such dead animals at least three feet below the surface of the ground.

Penalty.

SEC. 8. That the violation of section 1 of this act shall be deemed a felony and be punishable with not less than one year or more than five years in the State penitentiary. The stock so shipped or driven into this State in violation of the said section shall be returned at the owner or owners' expense when caught on the train or in or within five miles of the unloading station, and if driven in or out on the way to the range or on the range shall be quarantined for ninety days, or so much longer as deemed necessary, by the State veterinary surgeon, at the expense of the owner or owners of the stock.

SEC. 9. That on failure to comply with any of the provisions of this act the owner or owners of said stock shall forfeit to the county wherein such violation or failure to observe the provisions of this act takes place the sum of five hundred dollars; and the stock owned by said party or parties shall be liable for said amount, to be recovered in a civil action by said county: *Pro-*

vided, That if the owner or owners of said stock are not residents of the State of South Dakota that an attachment may issue, as provided in the code of civil procedure, except that the county shall not be required to give a bond or undertaking. And it is hereby made the duty of the State's attorney of the various counties to enforce the provisions of this act within their respective counties.

Construction of act. SEC. 10. *Provided*, That nothing in this act contained shall be construed to require parties desiring to ship or drive live stock from the State to notify the State veterinary surgeon or his deputies, unless there is a deputy veterinary surgeon or other officer appointed for that purpose in and for the county from where such shipment is made or where the range of said live stock is located: *And provided, further*, That nothing in this act shall apply to that portion of the State lying east of the Missouri River.

Acts repealed. SEC. 11. All acts and parts of acts in conflict with this act are hereby repealed.

SEC. 12. An emergency is hereby declared to exist, and this act shall be in force from and after its passage and approval.

Approved March 6, 1893.

AN ACT to prevent the spreading of contagious disease among domestic animals.

Be it enacted by the Legislature of the State of South Dakota :

Infected animals denied entry; penalty. SECTION 1. Any person who shall hereafter knowingly and willfully bring or cause to be brought into this State any hogs or other domestic animals infected with contagious disease, or any person who shall knowingly carry or drive or cause to be carried or driven upon any public highway or within the distance of one mile of any such highway in this State, or who shall knowingly and willfully suffer or permit any hogs or other domestic animals infected with contagious disease to run at large, shall be fined in any sum not to exceed one hundred dollars and shall be liable in a civil action for all damages occasioned thereby.

SEC. 2. An emergency is hereby declared to exist, and this act shall take effect and be in force from and after its passage and approval.

Approved March 6, 1895.

AN ACT providing for the suppression and prevention of contagious diseases among sheep.

Be it enacted by the Legislature of the State of South Dakota :

Restraint on diseased sheep. SECTION 1. The owners, agents, and persons in charge of any sheep any of which are now or shall hereafter be affected with scab or any infectious or contagious disease shall keep the entire flock among which said diseased sheep may be securely within some enclosure, or shall carefully herd them so that they cannot range upon any ground accustomed to be ranged upon by any other sheep, and shall restrain them from straying over or traveling upon any public highway or other road.

Notices to be posted. SEC. 2. All owners, agents, and persons in charge of such infected flock of sheep shall post, or cause to be posted, in conspicuous places on the boundaries of their range where said infected sheep may be, not less than four notices, signed with the name of the owner, agent, or person in charge of said flock, printed or written in large type or letters on white paper, which paper shall be at least twelve inches square, said notice to read as follows: "The sheep on this range are infected with a contagious disease." And such notice shall be kept so posted while said sheep are so diseased.

Unlawful to remove diseased sheep. SEC. 3. It shall be unlawful for any person or persons owning or having charge or control of any sheep affected with scab or any infectious or contagious disease to move or permit the same or any of them to be moved from the range whereon they may be while so diseased, except by written permission of the sheep inspector of the county in which said sheep are then located.

Right of sheep owners. SEC. 4. Any person owning sheep, or any person in his employ, shall have the right to examine any band of sheep that shall be driven, or shall pass within, two miles of his headquarters; and any person or persons in charge of such sheep shall stop them and allow them to be examined, and shall render the necessary assistance in catching and examining them. If the person so in charge of such sheep refuse to render the assistance as above required, he shall be punished as hereinafter provided.

Transporting diseased sheep; penalty. SEC. 5. Any person who shall knowingly carry or drive, or cause to be carried or driven, or shall negligently allow to stray, one or more sheep affected with the scab or any infectious or contagious disease into a flock of sheep or in contact with any sheep belonging to another person, or shall knowingly carry or cause or permit to be carried the parasite which causes such scab or other infectious or contagious disease, and places or allows to be placed such parasite where another person is corralling or herding sheep, so that such sheep may become affected thereby, shall be guilty of a felony, and upon conviction thereof shall be confined in the State's prison not more than five years, or shall be fined in any sum not more than five hundred dollars.

Transporting diseased sheep by railroad. SEC. 6. It shall be unlawful for any person or persons shipping sheep over any railroad, whether into this State or from one place to another in this State, to move or ship any sheep infected with the scab or any infectious or contagious disease from the stock yards or other shipping place of the railroad company, or from any other shipping place, until permitted so to do by the sheep inspector of the county in which such sheep may then be, such permission to be in writing and signed by said inspector.

Penalty. SEC. 7. Any person who shall be convicted of the violation of any of the provisions of this act, other than section 5, shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than one hundred dollars nor more than six hundred dollars, which fine shall be a first lien upon such flock of sheep until the same shall be fully paid.

Damages. SEC. 8. Any person violating any of the provisions of this act shall be liable in damages to any person or persons injured thereby, directly or indirectly, to be recovered in a civil action in any court of competent jurisdiction.

SEC. 9. All acts and parts of acts in conflict with this act are hereby repealed.

SEC. 10. Whereas an emergency exists, this act shall take effect and be in force from and after its passage and approval.

Approved March 11, 1895.

AN ACT to amend section 10 of chapter 154 of the session laws of 1893.

Be it enacted by the Legislature of the State of South Dakota:

Shipment of live stock. SECTION 1. That section ten of chapter one hundred and fifty-four of the session laws of 1893, entitled "An act to regulate the shipping of live stock into the State, through the State and out of the State of South Dakota," be and the same is hereby amended to read as follows: Section 10. *Provided*, That nothing in this act contained shall be construed to require parties desiring to ship or drive live stock from the State to notify the State veterinary surgeon and his deputies, unless there is a deputy veterinary surgeon or other officer appointed for that purpose in and for the county from which such shipment is made or where the range of said live stock is located: *Provided further*, That nothing in this act contained shall be construed to authorize the inspection of live stock shipped out of any county in this State in which live stock is not permitted to run at large the entire year.

SEC. 2. All acts and parts of acts in conflict with this act are hereby repealed.

Approved March 12, 1895.

AN ACT to amend and reenact section 1 and to amend sections 8 and 12 of chapter 1.2 of the session laws of 1893.

Be it enacted by the Legislature of the State of South Dakota:

Appointment of deputies. SECTION 1. That section one of chapter one hundred and seventy-two of the session laws of 1893, entitled "An act authorizing the State veterinary surgeon to appoint deputies, defining their duties and providing compensation for the same," be and the same is hereby amended to read as follows: Section 1. It is hereby made the duty of the State veterinary surgeon to select and appoint deputies in each county which has a public record of stock brands and where live stock is allowed by law to run at large on open ranges: *Provided*, A petition is presented to said State veterinary surgeon signed by at least fifty residents of said county and endorsed by the county commissioners.

SEC. 2. That section eight of said act be and the same is hereby amended to read as follows: Section 8. Every deputy so appointed shall collect for every inspection made from the owner or shipper for whom such inspection is made a fee not to exceed two cents per head for horses or cattle and not to exceed fifty cents per car load of any other stock, which fee he shall immediately pay over to the treasurer of the said county in which he is located and take his receipt for the same at the expiration of each week, and in case any owner or shipper shall refuse to pay the inspection fees, the State veterinary surgeon or his deputy shall take out of the stock inspected and retain in his possession one or more animals sufficient to cover inspection fees, together with all accruing costs of taking, keeping, advertising, and selling the same, and if not redeemed by the owner or shipper within five days after such taking, the stock to be sold under the same regulations as required by law for impounded stock, the proceeds of the sale to be applied as stated above, and if any surplus money is left after all expenses are paid the surplus to be returned to the owner or shipper by the State veterinary surgeon or his deputy conducting the sale.

Duty of veterinary surgeons. **SEC. 3.** That section twelve of said act be and the same is amended to read as follows: Section 12. It shall be the duty of the State veterinary surgeon to publish at the end of the shipping season a report on January first of every year the number of stock shipped out of the State and on August first the number of stock shipped in and give information for statistical purposes from his record.

SEC. 4. All acts and parts of acts in conflict with the provisions of this act are hereby repealed.

Approved March 12, 1895.

AN ACT to provide for the inspection of sheep.

Be it enacted by the Legislature of the State of South Dakota:

Appointment of inspector. **SECTION 1.** In every county in this State containing two thousand sheep or more the county commissioners shall appoint a sheep inspector, who shall be selected by the sheep owners of the county at a meeting held for that purpose. Such inspector shall hold his office for the period of two years, and until his successor is selected and has qualified, unless sooner removed for cause. Any inspector may act in any other county of the State having no inspector on the request of the county commissioners thereof. The meeting mentioned in this section shall be called by the county commissioners, and they shall give notice of such meeting by notice published in a newspaper of the county for two successive weeks immediately prior to the date of such meeting, and such notice shall state the time and place of holding such meeting.

Duty of inspector. **SEC. 2.** It shall be the duty of the sheep inspector whenever he shall have knowledge or information that any sheep within his jurisdiction have the scab or any infectious or contagious disease, to inspect said sheep; and should he find them so affected, he shall forthwith notify the owner or person in charge of them of the fact, upon a proper printed form to be furnished by the county, and shall also file a copy of said notice in the office of the county auditor of his county; and said inspector shall at once place such infected sheep in quarantine, and shall also give to the owner or person in charge of them directions for treatment, and shall furthermore brand every sheep in the affected flock with the symbol Z. And the inspector shall instruct the owner or person in charge of the infected sheep to keep said sheep so branded until cured, and until discharged by written order of the inspector. The inspector shall also visit such infected flock once a month for the purpose of seeing that they are being treated according to his directions, and shall file written reports of such visits with the county auditor until such time as he finds said flock to be cured, when he shall give the owner or person in charge thereof a certificate of freedom from disease, and shall thereupon allow the owner or person in charge to obliterate the symbol so placed upon said sheep as above provided, and shall make a written report of the same to the county auditor. It shall also be the duty of the sheep inspector to inspect all sheep unloaded from the railroad cars, and to compel the owner or person in charge thereof to thoroughly dip said sheep in some good sheep dip before permitting them to be taken out of the railroad company's yards, whether the sheep come from within this State or from without this State. It shall also be the duty of the sheep inspector, should he find sheep unloaded from the railroad cars to be affected with the scab or any infectious or contagious disease, to prohibit their removal from the yards under any circumstances. In the

event of sheep developing scab after inspection and removal, the inspector shall proceed as provided in section 2 of this act. The inspector shall cause a printed notice of the law regarding the duties of parties snipping sheep over the railroad in this State to be posted in a conspicuous place in every depot or unloading place in his district. The inspector may appoint deputies at the various unloading points in his district to superintend the unloading of sheep from the cars, and see to the sheep being held in the stock yards until the inspector arrives to inspect them.

Liability of railroad; penalty. SEC. 3. Upon the arrival of any sheep at any unloading point in this State, the person in charge of them shall immediately report them to the inspector or his deputy for inspection, and the inspector shall thereupon inspect and report as provided in section 2 of this act; and it shall be unlawful for any railroad company to release from their yards any sheep until so inspected; and in case any railroad company shall release from their yards the sheep before being inspected, and in case of failure from any cause of the person in charge of such sheep to report the same for inspection as above provided, or for any disobedience to the lawful instructions of the inspector after inspection, a fine of one hundred dollars shall be imposed upon said railroad company or said person, as the case may be, for each offense, in any court of competent jurisdiction, which fine when collected shall be paid into the county treasury for the use of the sheep inspector's fund, and any judgment for such fine against the person in charge of such sheep or against the owner thereof shall be a lien upon said stock until paid.

Restrictions on diseased animals. SEC. 4. The person in charge of said flock, when the same is reported by the inspector to be diseased, shall immediately herd or house the same under the direction of the inspector, so that they can not range upon any ground accustomed to be ranged upon by any other sheep, and shall restrain them from passing over or traveling upon any public highway or other road. The person in charge of such sheep shall at once follow any directions for treatment prescribed by the inspector, and promptly and faithfully carry out the same until a cure is effected, or until discharged by the inspector.

Penalty for hindrance. SEC. 5. The owner or person in charge of any sheep about to be inspected shall afford the inspector all reasonable facilities and assistance for making his inspection, and for every violation of the provisions of this section the owner or person in charge of such sheep shall be fined in any sum not less than ten dollars nor more than one hundred dollars, and every separate day's neglect or refusal so to do shall constitute a separate offense; and the written report of an offense made by an inspector under oath shall be prima facie evidence of the commission of the offense, and any justice of the peace of the county where the offense is committed shall have jurisdiction thereof; and the inspector shall ex-officio report all violations of the provisions of this act of which he has knowledge, and shall prosecute the same.

Oath and bond of inspector. SEC. 6. Every inspector before entering upon the duties of his office shall take the oath of office prescribed by law, and shall give bond to the State of South Dakota in the penal sum of one thousand dollars, with sufficient sureties, conditioned that he will faithfully perform the duties of his office; said bond to be approved by the county auditor, who shall after approval indorse upon every bond he shall approve as follows: "I am acquainted with the sureties herein, and believe them to be worth the amount of the within bond, over and above their debts and liabilities."

Suit against bond. SEC. 7. Such bond, with the oath thereon, shall be recorded in the office of the register of deeds of the county in which the inspector shall reside, and may be sued on by any person injured on account of the unfaithful performance of said inspector's duty: *Provided*, That no suit shall be so instituted after more than twelve months have elapsed from the time the cause of action accrued.

Record. SEC. 8. Every inspector shall keep a fair and correct record of all his official acts, and, if required, give a certified copy of any record upon payment of the fees therefor; and in case of the inspector's death, resignation, removal, or expiration of his term, said record shall be deposited with the county auditor, to be delivered to the successor of such inspector.

Salary. SEC. 9. The inspector shall receive three dollars a day while necessarily employed in inspecting sheep, and his deputies shall receive the same pay, and all fines and penalties shall be paid to the county treasurer, to be set aside as an inspection fund.

Notice fees. SEC. 10. The notices herein provided for shall be served by the inspector, any of his deputies, or by the sheriff or any constable of the county, and the same fee shall be allowed therefor as are now allowed by law to sheriffs for like services.

Forfeiture of office; penalty. SEC. 11. Whenever any sheep inspector shall willfully and falsely report any sheep to be affected with disease, or willfully and falsely report any sheep inspected by him to be free from disease, he shall forfeit his office as an inspector and shall be subject to a penalty of not less than twenty-five dollars nor more than one hundred dollars.

Removal of inspector, when. SEC. 12. If any sheep inspector shall be found guilty of any of the offenses set forth in section 11 of this act, or if on complaint in writing signed by any three sheep breeders of the county the county commissioners, after allowing the inspector a fair hearing, shall be of the opinion that he is incompetent to discharge intelligently and efficiently the duties of his office, or that, having sufficient knowledge or information, he has for any cause willfully or negligently failed to make the required inspection, or that he has needlessly made inspections for the purpose of obtaining fees, or that his reports have been influenced by favor or prejudice, or from any cause he has willfully or negligently failed in the proper discharge of the duties of his office, it shall be the duty of the said county commissioners to declare said inspector's office vacant, and to immediately appoint a successor to such inspector.

Taxes; salary. SEC. 13. In each county there shall be levied and assessed annually a tax of one-half of a mill upon the dollar of the assessed valuation of the sheep within the county, which shall be collected as other general taxes, and which, with penalties herein provided, shall constitute a sheep inspector's fund of the county, and which fund shall only be expended in the payment of the legal services of the sheep inspector and his deputies and for such other expenses as are provided for in this act, and said fees and expenses shall only be paid by the county treasurer, after they shall have been approved and allowed by the county commissioners in the same manner and form as claims against the county are approved and allowed by them; and from said fund the sheep inspector shall be paid not to exceed three dollars per day while actually employed in making the annual round which it is hereby made his duty to make between the tenth day of August and the tenth day of December in each year, besides three dollars per day for each day actually employed in making the inspections required by sections 2 and 3 of this act, and when he reports in substance no disease.

SEC. 14. All acts or parts of acts in conflict with this act are hereby repealed.

SEC. 15. An emergency is hereby declared to exist, and this act shall take effect and be in force from and after its passage and approval.

Approved March 9, 1897.

TENNESSEE.

AN ACT to prevent the spread of communicable diseases among domestic animals in the State of Tennessee.

Be it enacted by the General Assembly of the State of Tennessee:

Appointment of commission and veterinary surgeon.

SECTION 1. That upon the nomination of the State board of health of a qualified person, resident of the State, and who is a graduate of some regular and established veterinary college and skilled in the art of veterinary science, the governor shall appoint and commission the same State veterinary surgeon, whose term of office shall be for five years from date of appointment, or until his successor shall have been appointed and duly qualified; said State veterinary surgeon to have such annual compensation as may be determined and agreed upon by the said State board of health: *Provided*, That the said State board of health shall have the power to remove said State veterinary surgeon when, in their judgment, the public welfare requires it.

Bond of veterinarian. SEC. 2. *Be it further enacted*, That the said State veterinary surgeon shall, before entering upon the discharge of his duties, take an oath or affirmation, as provided by law in the case of other State officers, and shall immediately execute a bond to the State of Tennessee in

the sum of ten thousand dollars, and with such security as shall be approved by the said State board of health, and file the same in the office of the secretary of state, conditioned for the faithful performance of the duty imposed upon said State veterinary surgeon as may be prescribed by said State board of health.

Supervision of board. SEC. 3. *Be it further enacted,* That the State board of health shall have the general supervision of all communicable diseases among domestic animals within or that may be in transit through the State, and they are empowered to establish quarantine against any animal or animals thus diseased, or that have been exposed to others thus diseased, whether within or without the State, and may make rules and regulations against the spread and for the suppression of said disease or diseases, as in their judgment may seem necessary and proper; and in the enforcement of such rules and regulations said State board of health shall have the power to call on any one or more of the peace officers, whose duty it shall be to give all the assistance in their power.

Penalty for hindrance. SEC. 4. *Be it further enacted,* That any person who willfully hinders, obstructs, or otherwise disregards or evades such quarantine as said State board of health may declare, or violate any rule or regulation they shall make in attempting to stamp out or restrict the spread of any disease or diseases aforementioned, or who shall resist any peace officer, acting under said board of health, shall be guilty of a misdemeanor, and upon conviction shall be fined not less than fifty dollars nor more than five hundred dollars, or imprisonment in the county jail for a period of three months, one or both, at the discretion of the court.

Restriction of diseased animals; penalty. SEC. 5. *Be it further enacted,* That in the event of any communicable disease aforesaid breaking out, or being reasonably suspected to exist in any locality in this State, it shall be the duty of the local health authorities, or persons owning or having any interest whatever in said animals, immediately to notify the said State board of health of the fact, when said board shall institute such measures for the restriction or stamping out of such disease or diseases as they may think necessary. Any person or persons above specified, who shall neglect or refuse to notify said State board of health of the existence of any communicable disease as aforementioned, shall be guilty of a misdemeanor, and upon conviction shall be fined not more than ten dollars, or confined in the county jail not exceeding two months, or both, at the discretion of the court.

Slaughtering diseased animals; appraisalment. SEC. 6. *Be it further enacted,* That whenever, in the opinion of the State board of health, the public safety demands the destruction of any animal or animals under the provisions of this act, they shall, before ordering the killing or slaughtering of the same, appoint two competent and disinterested freeholders, who shall be affirmed or sworn before proceeding to act, and they, together with the State veterinary surgeon, shall thus constitute a board of appraisalment to make a just and true valuation of said animal or animals to be so killed or slaughtered, and in valuing shall consider the health and condition of animal when killed; and after said board of appraisalment shall make and deliver a written certificate setting forth all the essential facts in the case to the lawful owner, who shall present the same for payment to the chairman of the court of county in which such animal or animals are so killed or slaughtered, and the same shall constitute a county charge, and to be paid as other claims against the county now are.

Importation of diseased animals; penalty. SEC. 7. *Be it further enacted,* That any person or persons who knowingly shall import or bring into this State any animal or animals affected with pleuro-pneumonia, rinderpest, glanders, or other communicable diseases, or who shall sell or trade, or offer for sale or trade, any animal or animals so diseased, shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine of not more than one hundred dollars or imprisonment in the county jail for a period not exceeding three months, or both, in the discretion of the court.

Receipt of moneys. SEC. 8. *Be it further enacted,* That the governor of the State, with the State board of health, may cooperate with the Government of the United States for objects of this act, and the governor is hereby authorized to receive and receipt for any moneys receivable by this State, under the provisions of any act of Congress which may at anytime be in force upon this subject, and to pay the same into the State treasury, to be used according to the act of Congress and the provisions of this act as nearly as may be.

Acts repealed. SEC. 9. *Be it further enacted, That all laws or parts of laws in conflict with this act be, and the same are hereby, repealed, and that this act take effect from and after its passage, the public welfare requiring it.*

Approved April 10, 1893.

AN ACT to amend chapter 180, acts of 1893, passed April 10, 1893, and approved April 10, 1893, entitled "An act to prevent the spread of communicable diseases among domestic animals in the State of Tennessee," and to provide greater protection to the live-stock industry of the State, and to provide penalties for the violation of same.

Be it enacted by the General Assembly of the State of Tennessee:

Duty of owners. SECTION 1. *That it shall be the duty of the owner or person in charge of any domestic animal or animals who discovers, suspects, or has reason to believe that any such animal or animals as aforesaid are affected with any communicable disease to immediately report the fact, belief, or suspicion to the county board of health of the county in which said domestic animal or animals are found.*

Duty of State board of health. SEC. 2. *Be it further enacted, That it shall be the duty of the State board of health to cooperate with the officials of the Federal Government, and with those of other States, in establishing interstate quarantine lines and in the enforcing of such rules and regulations as shall best protect the live-stock industry of this State against splenic or Texas fever.*

Duty of county board of health. SEC. 3. *Be it further enacted, That the county board of health of each county, whenever any case or cases of communicable disease among the domestic animals of their county is reported to exist, they shall immediately cause the same to be investigated, preferably by a qualified veterinarian, and should such investigation show a reasonable probability that such animal or animals are affected with a communicable disease, the said county board of health shall immediately establish such temporary quarantine as may be necessary, in their judgment, to prevent the spread of such disease, and they shall without delay report all action taken to the State board of health, and the acts of the said county board of health, establishing said temporary quarantine, shall have the same force and effect as though established by the State board of health, until such time as the said State board of health shall take charge of the case or cases, and county board of health of those counties which form the north border of the quarantine line, as established by the Federal authorities, shall adopt and enforce such rules and regulations as said State board of health may prescribe, having for their object the prevention and restriction of splenic or Texas fever, or any communicable disease among domestic animals, which may be either threatened or developed in such localities. And all expenses incurred by the county board of health in carrying out the provisions of this act shall be a county charge and shall be paid in like manner as other expenses of the county now are.*

Introduction of diseased animals; penalty. SEC. 4. *Be it further enacted, That any person, firm, or corporation who shall knowingly import or introduce any cattle into the State of Tennessee from any district south of the quarantine line established, or as may be established by the Secretary of the United States Department of Agriculture or Congress, which is affected with splenic or Texas fever, or which bears upon its or their body or bodies fever ticks (*Boophilus borts*), or other causes of said disease, except such cattle so introduced or imported are immediately slaughtered, or are brought into the State in conformity with such rules and regulations as may be prescribed by the State board of health, shall be guilty of a misdemeanor, and upon conviction thereof shall be fined in any amount not less than five hundred dollars nor more than five thousand dollars, or confined in the county jail for not less than one nor more than three years, in the discretion of the court.*

Penalty for hindrance. SEC. 5. *Be it further enacted, That any person who owns or is in possession of live stock which is reported or suspected to be affected with any communicable disease, or with insects which may produce such diseases, who shall refuse to allow said county board of health, or any one acting under its order, to examine such stock, or who shall hinder or obstruct the said board, or its appointee, in any examination of or in any attempt to examine such stock, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than fifty dollars nor more than two hundred dollars.*

Diseased animals; penalty. SEC. 6. *Be it further enacted*, That any person who shall have in his or her possession any domestic animals affected with any communicable disease or fever tick, knowing such animal to be affected, who shall permit such animal or animals to run at large, or who shall keep such animal or animals where other domestic animals not affected by or previously exposed to such communicable disease may be exposed to its contagion or infection, or who shall ship, drive, sell, traffic, or give away such animal or animals which have been exposed to such infection or contagion, or who shall move or drive any domestic animal in violation of any direction, rule, regulation, or order of the said State board of health establishing and regulating live-stock quarantine, or the restriction or spread of communicable diseases among domestic animals, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any amount not less than fifty dollars nor more than one hundred dollars for each of such exposed or diseased domestic animals which he or she shall permit to run at large, or sell, ship, drive, trade, or give away, in violation of the provisions of this act: *Provided*, That any owner of domestic animals which have been affected with or exposed to any communicable disease may dispose of the same after having obtained from said State board of health, or its authorized veterinarian, a certificate of health for such animal or animals.

SEC. 7. *Be it further enacted*, That this act take effect from and after its passage, the public welfare requiring it.

Approved February 15, 1897.

TEXAS.

AN ACT to be entitled an act to amend article 5043k of the Revised Statutes of 1895, relating to the live stock sanitary commission, and the movement of live stock thereunder.

Be it enacted by the Legislature of the State of Texas:

SECTION 1. That article 5043k be and the same is amended so as hereafter to read as follows:

Quarantine line. Any quarantine line that may be fixed by the live stock sanitary commission against Texas or splenic fever shall be so fixed as to conform to the Federal quarantine line established, or that may be established, by the United States Department of Agriculture.

State and Federal quarantine. SEC. 2. The fact that there is serious question of the power of the livestock sanitary commission to establish a quarantine line in conformity with the line established by the United States Department of Agriculture, and unless such line is established the entire State may be quarantined by the United States authorities, and incalculable injury done to the cattle interests of Texas, creates an imperative public necessity and an emergency exists that the constitutional rule requiring all bills to be read on three several days be suspended, and that this bill be put on its third reading and final passage, and that this act take effect and be in force from and after its passage, and it is so enacted.

Approved January 28, 1897.

UTAH.

DISEASED ANIMALS.

Possession of diseased animal a misdemeanor. 58. Any person owning or having in charge any domestic animals afflicted with a contagious or infectious disease that, knowing such animal to be diseased, shall bring or drive the same into this State shall be deemed guilty of a misdemeanor.

Must be slaughtered. 59. Any person owning or having in charge any animal afflicted with glanders or farcy shall, upon discovery of its condition, at once deprive it of life; and any peace officer may deprive such animal of life on the omission or refusal so to do by the owner or person in charge. Any such owner or person in charge omitting or refusing to comply with the provisions of this section shall be deemed guilty of a misdemeanor.

Running at large or selling. 60. Any person owning or having in charge any domestic animal afflicted with a contagious or infectious disease that, knowing such animal to be diseased, shall allow it to run

at large upon any uninclosed land, common, or highway, or that shall sell or dispose of such animal without fully disclosing its condition to the purchaser, shall be deemed guilty of a misdemeanor.

Duty of individuals. 61. Any person owning or having in charge any domestic animal afflicted with a contagious or infectious disease shall immediately remove the same to some place where it can not endanger the health of other domestic animals.

Liability. 62. Any person violating any of the provisions of this chapter, in addition to the penalties herein provided, shall be liable for all damages that may accrue to any party damaged by reason of said animals imparting disease.

DIPPING SHEEP.

Dipping sheep; penalty. 63. Every person owning, controlling, or ranging sheep in the State shall have all such sheep thoroughly dipped at least once a year in some preparation that will kill scab, or shall be deemed guilty of a misdemeanor, and upon conviction thereof may be fined in any sum not exceeding one hundred dollars for each offense.

Revised Statutes.

VERMONT.

Diseased sheep running at large; penalty, etc. SEC. 4802. If sheep are infected with the "hoof ail" or "foot rot," or with the "scab," the owner or keeper thereof shall restrain them from running at large in the public highways or commons, and keep them in an enclosure; and if he, knowing them to be diseased, knowingly permits them to go at large upon a common or public highway, or if such sheep, while so diseased, are found in an enclosure other than that of such owner or keeper, he shall be fined ten dollars, to the use of the town where such offense is committed, and shall also be liable to the party injured for the damages sustained, in an action upon this statute.

Sheep forfeited. SEC. 4803. If sheep infected with the "hoof ail" or "foot rot" are found at large upon a common, public highway, or lane, or lands not owned or occupied by their owner or keeper, through the neglect of such owner or keeper, said sheep shall become forfeit to any person who takes them up, and the owner of such sheep shall not have an action at law or equity for their recovery.

PLEURO-PNEUMONIA AND OTHER INFECTIOUS DISEASES.

Bringing cattle with pleuro-pneumonia into State; penalty. SEC. 4804. If a person drives or brings domestic animals into this State, or is accessory thereto, knowing that any of them have the disease, or have been exposed to the disease known as pleuro-pneumonia, he shall be fined not more than five hundred dollars, or be imprisoned not more than twelve months and not less than one month, in the discretion of the court.

Town may take measures for protection. SEC. 4805. A town, at a meeting held for that purpose, may establish regulations, appoint officers or agents, and raise and appropriate money to arrest and prevent the spread of the cattle disease known as pleuro-pneumonia.

Power of selectmen. SEC. 4806. The selectmen may perform all acts and make all rules and regulations for and in behalf of the town necessary to carry into effect the powers conferred on the town by this chapter until the town otherwise orders at a meeting holden for that purpose.

Animals with other infectious disease. SEC. 4807. If a person brings into this State any domestic animals which he knows to be infected with an infectious or contagious disease, or exposes such cattle or other animals known to him to be so infected, to other cattle and animals

not infected with such disease, he shall be fined not more than five hundred dollars, and not less than one hundred dollars.

Selectman's and alderman's duties; penalty. SEC. 4808. The selectmen of the towns, and the board of aldermen of the cities of this State, may make and enforce such regulations as they deem proper to prevent the spread of infectious or contagious diseases among domestic animals within their respective towns and cities, and shall inquire into all such cases coming to their knowledge, and shall immediately report the same to the governor. A person who knowingly violates or refuses to obey such regulations made by such town or city authorities shall be fined one hundred dollars.

BOARD OF AGRICULTURE.

May prohibit introduction of diseased animals. SEC. 4809. The board of agriculture may prohibit the introduction of horses or other domestic animals believed to be infected with or exposed to any contagious disease, into this State, or may quarantine all such animals for such time as the public good requires; but shall not prohibit the transportation of the same in cars through this State.

Penalty. SEC. 4810. If a person violates such order, after the same has been published three successive days in such newspapers published in this State as the board directs, he shall be fined not more than three hundred dollars for each offense, and every officer or agent of any company, or other person who violates such order, shall be fined as aforesaid. The introduction into this State at the same time of a number of horses, cattle, or other domestic animals, contrary to the orders of such board, shall be deemed a separate and distinct offense for each animal.

To procure and publish information: witnesses. SEC. 4811. The board shall endeavor to obtain full information in relation to any contagious disease which may prevail among domestic animals near the borders of the State, and publish and circulate such information at their discretion; and should any such disease break out, or should there be reasonable suspicion of its existence among cattle or other domestic animals in any town in this State, they shall examine the cases and publish the results of their examination for the benefit of the public. The board is also authorized to examine under oath, in the several towns and cities in this State, all persons possessing or believed to possess knowledge of any material facts concerning the existence or dissemination or danger of dissemination of diseases among domestic animals, and for this purpose shall have all the power now conferred upon justices of the peace to compel witnesses to attend and testify.

Costs. SEC. 4812. All costs and expenses incurred in procuring the attendance of such witnesses shall be allowed by the State auditor, upon the approval of the governor, and be paid by the State.

May quarantine animals, investigate and make regulations; penalties. SEC. 4813. When bovine tuberculosis or any contagious disease exists in the State among cattle or other domestic animals, the board of agriculture may quarantine all infected animals or such as they suppose have been exposed to the contagion, may prohibit any animal from passing on or over any of the highways near the place of quarantine, may enter upon any premises where there are animals suspected to have bovine tuberculosis or any contagious disease, may employ such expert help and means as they deem necessary to a thorough investigation of such diseases, may make all investigations and regulations they deem necessary for the detection, prevention, treatment, cure, and extirpation of such disease, but shall not apply the tuberculin test without the consent of the owner of the cattle, but in quarantine regulations against cattle imported from without the State the tuberculin test may be applied, and they may condemn and order killed any cattle or other domestic animals believed by said board to be infected with bovine tuberculosis or any contagious disease, and may order the bodies of the same buried or burned, as in their judgment the case may require; may forbid the sale or removal from the premises of any dairy product from cows that are believed to have bovine tuberculosis. Any person who shall knowingly violate or refuse to comply with any order or regulation of such board, made under the authority of this section, shall be fined not more than two hundred dollars, or be imprisoned not more than two years, or both.

Penalty for offering to sell or selling diseased animal or meat. SEC. 4814. If any person shall sell or offer to sell any cattle or other domestic animal known to him to be infected with bovine tuberculosis or any contagious disease, or any disease dangerous to the public health, or shall sell or offer to sell any part or parts of such cattle or other domestic animal, he shall be fined not more than two hundred dollars, or be imprisoned not more than two years, or both.

Animals killed, how paid for. SEC. 4815. The value of all cattle or other domestic animals, killed by the written order of the board of agriculture, shall be appraised by one of said board and a disinterested person selected by the owner of the condemned animals, but if these two can not agree upon the amount of the appraised value of the animal, they shall select a third disinterested person, who together with them shall appraise the animal, such appraisal to be made just before killing, and on a basis of health. The limit of the appraisal of cattle shall be forty dollars. A post-mortem examination shall be made, and if the animal be found affected with bovine tuberculosis or any disease dangerous to the public health, the owner of the animal shall receive one-half the appraised value; but if no bovine tuberculosis or disease dangerous to the public health be found, the owner of the animal shall receive the full amount of the appraisal, and in addition shall receive the slaughtered animal. The amount which the owner is entitled to receive shall be paid by the State to the owner of such animal or animals upon a written order, signed by the member of the board in charge and countersigned by the secretary of said board. No indemnity shall be paid to the owner of condemned cattle or other domestic animals that have not been owned and kept in the State for at least six months previous to the discovery of the disease. Any person who shall knowingly violate or refuse to comply with any regulations made by such board of agriculture under the authority and provisions of this section shall be fined not more than two hundred dollars, or imprisoned not more than two years, or both.

Expenses, how paid. SEC. 4816. All expenses incurred by the board under the provisions of the three preceding sections shall be allowed by the State auditor, upon the approval of the governor, and be paid by the State.

Commissioners' regulations to take precedence. SEC. 4817. Whenever the board shall make and publish regulations concerning the extirpation, cure, or treatment of domestic animals infected with, or which have been exposed to, any contagious disease, such regulations shall supersede the regulations made by the selectmen of the several towns, or the board of aldermen of the several cities, upon the same subject; and the operation of such regulations made by said authorities shall be suspended during the time those made by the board as aforesaid are in force.

Record; report. SEC. 4818. The board shall keep a record of its doings and report the same to the governor, prior to the fifteenth day of September, annually, unless sooner required.

Majority to sign orders, etc. SEC. 4819. All orders, appointments, and notices from the board shall be signed by a majority of the same.

Limitation. SEC. 4820. Every prosecution for a violation of any of the provisions of this chapter shall be commenced within thirty days from the commission thereof.

Statutes of 1894.

AN ACT to amend section 4820 of chapter 203 of the Vermont statutes, relating to preservation of cattle and sheep.

It is hereby enacted by the General Assembly of the State of Vermont:

SECTION 1. Section four thousand eight hundred and twenty of the Vermont statutes is hereby amended so as to read as follows:

Every prosecution for a violation of any of the provisions of this chapter shall be commenced within six months from the commission thereof.

SEC. 2. This act shall take effect from its passage.

Approved November 7, 1896.

VIRGINIA.

AN ACT to provide for the protection of domestic animals, and to authorize and empower the board of control of the experiment station of the Virginia Agricultural and Mechanical College at Blacksburg to establish live-stock quarantine lines, rules, and regulations, and to prescribe penalties for violating the same.

Board of control of experiment station to protect animals from contagious diseases.

1. *Be it enacted by the General Assembly of Virginia,* That it shall be the duty of the board of control of the experiment station of the Virginia Agricultural and Mechanical College at Blacksburg to protect the domestic animals of the State from all contagious or infectious diseases of a malignant character, whether said diseases exist in the State or elsewhere, and for this purpose they are hereby authorized and empowered to establish, maintain, and enforce such quarantine lines and sanitary rules and regulations as they may deem necessary. It shall also be the duty of said board to cooperate with live-stock quarantine commissioners and officers of other States and Territories and with the United States Secretary of Agriculture in establishing such interstate quarantine lines, rules, and regulations as shall best protect the live-stock industry of this State against Texas or splenic fever. It shall be the duty of said board, upon receipt by it of reliable information of the existence among the domestic animals of the State of any malignant disease, to cause the veterinarian employed at said experiment station to go at once to the place where any such disease is alleged to exist and make a careful examination of the animals believed to be affected with any such disease, and ascertain, if possible, what, if any, disease exists among the live stock reported to be affected, and whether the same is contagious or infectious; and if said disease is found to be of a malignant, contagious, or infectious character they shall direct and enforce such quarantine lines and sanitary regulations as are necessary to prevent the spread of any such disease. And no domestic animal infected with disease, or capable of communicating the same, shall be permitted to enter or leave the district, premises, or grounds so quarantined, except by authority of the said board or its veterinarian. The said board shall also from time to time give and enforce such directions and prescribe such rules and regulations as to separating, feeding, and caring for such diseased and exposed animals as they shall deem necessary to prevent the animals so affected with such disease, or capable of communicating disease, from coming in contact with other animals not so affected. And the said board and its veterinarian are hereby authorized and empowered to enter upon any grounds or premises to carry out the provisions of this act.

Quarantine lines and regulations.

2. When the said board shall have determined the quarantine lines and other regulations necessary to prevent the spread among domestic animals of this State of any malignant, contagious, or infectious disease found to exist among the live stock of this State or elsewhere, and given their orders, as hereinbefore provided, prescribing quarantine and other regulations, they shall notify the governor of the State, who shall issue his proclamation proclaiming the boundary of such quarantine around such diseased stock, and the orders, rules, and regulations prescribed by the board; and said board shall give such notice as to it may seem best to make the quarantine established by them effective.

Locating and ascertaining nature of disease.

3. The said board shall have power to carry into full effect all orders by them given, as hereinbefore provided, and the expense incurred by it shall be paid out of the treasury of the State on warrants drawn by the chairman of said board; provided that no expense shall be incurred except such as may be necessary to carry into effect the necessary quarantine and other regulations prescribed by said board. And said board shall have the power to direct the veterinarian employed at said experiment station to assist it in the investigation of the diseases amongst the live stock of this State whenever they may deem his services necessary; provided that no compensation shall be paid said veterinarian other than his actual expenses while engaged in such duties.

Board and veterinarian may enter premises.

4. When said board shall have good reason to believe that the health of the live stock of the State is endangered by the existence of contagious and infectious diseases in certain localities in other States, Territories, or counties, or that there are conditions which render such domestic animals from such infected districts liable to convey such disease, they shall notify the governor, who shall, by proclamation prohibit entry of stock.

5. When said board shall have good reason to believe that the health of the live stock of the State is endangered by the existence of contagious and infectious diseases in certain localities in other States, Territories, or counties, or that there are conditions which render such domestic animals from such infected districts liable to convey such disease, they shall notify the governor, who shall, by proclamation prohibit entry of stock.

Power of board.

6. When said board shall have good reason to believe that the health of the live stock of the State is endangered by the existence of contagious and infectious diseases in certain localities in other States, Territories, or counties, or that there are conditions which render such domestic animals from such infected districts liable to convey such disease, they shall notify the governor, who shall, by proclamation prohibit entry of stock.

Governor may prohibit entry of stock.

7. When said board shall have good reason to believe that the health of the live stock of the State is endangered by the existence of contagious and infectious diseases in certain localities in other States, Territories, or counties, or that there are conditions which render such domestic animals from such infected districts liable to convey such disease, they shall notify the governor, who shall, by proclamation prohibit entry of stock.

mation, prohibit the importation of any live stock of the kind diseased into the State, unless accompanied by a certificate of health given by a properly authorized veterinarian, and all such animals arriving in this State shall be examined immediately by a veterinarian designated by the board, and if, in his opinion, there is any danger from contagion or infection, they shall be placed in close quarantine at the expense of the owner until such danger of infection or contagion is passed, when they shall be released by order of the said veterinarian.

Duty of railway corporations. 5. It shall be the duty of the railway corporations doing business in the State to cleanse and disinfect the cars used by them in transporting live stock in or through this State at such times and places and in such manner as the board may designate, whenever, in the opinion of the board, any such order may be necessary to prevent the spread of infectious or contagious disease. Any such corporation violating the provisions of this section shall be liable to a penalty of five hundred dollars for each offense, to be recovered in a civil action to be prosecuted under the direction of the attorney-general in the name of the Commonwealth of Virginia.

Penalty. 6. Any railroad company, navigation company, or other corporation or common carrier who shall knowingly or willfully violate, disregard, or evade any of the rules or directions of the board or veterinarian establishing or governing quarantine, or who shall evade or attempt to evade any quarantine proclamation of the governor of this State declaring quarantine limits, upon conviction thereof shall be fined not less than five hundred dollars nor more than five thousand dollars for each and every offense, and shall be liable for all damages caused to any live stock by its failure to comply with the requirements of this act.

Owner to report disease. 7. It shall be the duty of any owner or person in charge of any domestic animal or animals who discovers, suspects, or has reason to believe that any of his domestic animals, or domestic animals in his charge, are affected with any contagious or infectious disease, to immediately report such fact, belief, or suspicion to the said board and to the chairman of the board of supervisors of the county in which said domestic animals are found.

Duty of board of Supervisors. 8. The board of supervisors of each county, whenever any cases of contagious or infectious diseases are reported to them in their county, shall immediately investigate the same. The investigation may be by the board or any member thereof, or by the employment of a qualified veterinarian; and should such investigation show a reasonable probability that a domestic animal is affected with a contagious or infectious disease, the supervisors shall immediately establish such temporary quarantine as may be necessary to prevent the spread of the disease, and report all action taken to the said board of control of experiment station of the Virginia Agricultural and Mechanical College, at Blacksburg, or some member thereof; and the acts of the supervisors establishing temporary quarantine shall have the same force and effect as though established by the board of control itself until such time as the said board of control shall take charge of the case or cases. All expenses incurred by the supervisors in carrying out the provisions of this act shall be paid in like manner as other expenses incurred by said supervisors in the discharge of their official duties.

Penalty for bringing in diseased animals. 9. Any person who shall knowingly bring into this State any domestic animal which is infected with any contagious or infectious disease, or any animal which has been exposed to any contagious or infectious disease, or which bears upon its body fever-ticks or other germs or causes of disease, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than five hundred nor more than five thousand dollars.

Duty of owner; penalty. 10. Any person who owns or is in possession of live stock which is reported to be affected with any infectious or contagious disease, or with insects which may produce disease, who shall refuse to allow said board or anyone acting under its order to examine such stock, or shall hinder or obstruct the said board or appointee in any examination of or in any attempt to examine such stock, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than one hundred dollars nor more than five hundred dollars.

Penalty. 11. Any person who shall have in his possession any domestic animal affected with any contagious or infectious disease or fever ticks, knowing such animals to be affected, who shall permit such animal to run at large, or

who shall keep such animal where other domestic animals not affected by or previously exposed to such disease may be exposed to its contagion or infection, or who shall ship, drive, sell, trade, or give away such diseased animal or animals which have been exposed to such infection or contagion, or who shall move or drive any domestic animal in violation of any direction, rule, regulation, or order of the board of control establishing and regulating live-stock quarantine, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than one hundred dollars nor more than five hundred dollars for each of such exposed or diseased domestic animals which he shall permit to run at large or sell, ship, drive, trade, or give away in violation of the provisions of this act: *Provided*, That any owner of domestic animals which have been affected with or exposed to any contagious or infectious disease may dispose of the same after having obtained from the said board or veterinary surgeon a bill of health for such animal or animals.

Board to call upon officer. 13. The said board shall have power to call upon any sheriff or deputy sheriff or constable to execute their orders, and such officer shall obey the orders of said board, and the officer or officers performing these duties shall each be entitled to one dollar and fifty cents per day for himself and horse, which payment shall be made upon a sworn account approved by said board, provided said expenses under this section shall not exceed in any event five hundred dollars per annum.

Penalty. 13. Except as otherwise provided in this act, any person who shall violate, disregard, or evade, or attempt to violate, disregard, or evade any of its provisions, or who shall violate, disregard, or evade, or attempt to violate, disregard, or evade any of the rules, regulations, orders, or directions of the said board establishing and governing quarantine, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined in any sum not less than one hundred dollars nor more than five hundred dollars.

Tuberculosis a highly contagious disease. 14. *Be it further enacted*, That the disease known as tuberculosis shall be classed as a highly contagious and infectious disease, and such measures shall be taken by the board and its authorized veterinarian as to them may seem necessary to eradicate and prevent the spread of said disease.

15. This act shall not be construed to repeal any law now in force for the protection of domestic animals.

16. This act shall be in force from its passage.

Approved, February 18, 1896.

WASHINGTON.

AN ACT to prevent the spread of contagious or infectious diseases among cattle, horses, and other domestic animals, and prescribing penalties for violation of the provisions thereof.

Be it enacted by the Legislature of the State of Washington:

Quarantine. SECTION 1. The local board of health of towns, counties, and cities, in case of existence in this State of tuberculosis or the disease called pleuro-pneumonia among cattle, or farcy or glanders among horses, or any other contagious or infectious disease among domestic animals, shall cause the animals in their respective towns, counties, or cities which are infected, or which have been exposed to infection, to be secured or collected in some suitable place or places within their respective towns, counties, or cities, and kept isolated; such isolation to continue as long as the existence of such disease or other circumstances may render it necessary: *Provided, however*, That the provisions of this act shall not apply to sheep in counties having a duly appointed sheep inspector.

Slaughter of animals. SEC. 2. The said local boards of health, when any such animal is adjudged by a veterinary surgeon, selected by the State board of health, to be infected with any contagious or infectious disease, may, in their discretion, order such diseased animals to be forthwith killed and buried at the expense of such town, county, or city.

Prohibit movement of animals. SEC. 3. The said local boards of health may, within their respective towns, counties, or cities, prohibit the departure of animals from any inclosure or exclude animals therefrom.

Regulations of boards of health. SEC. 4. The said local boards of health may make regulations in writing to regulate or prohibit the passage from, to, or through their respective towns, counties, or cities, or from place to place within the same, of any cattle or any other domestic animals, and may arrest and detain, at the cost of the owners thereof, all animals found passing in violation of such regulations and may take all necessary measures for the enforcement of such prohibition, and also for the preventing the spread of any disease among the animals to their respective town, county, or city and the immediate vicinity thereof.

Publication of regulations. SEC. 5. Such regulations shall be recorded upon the records of their respective towns, counties, and cities, and shall be published in such towns, counties, and cities in such manner as may be provided in such regulations.

Precedence of regulations. SEC. 6. When the State board of health make and publish any regulations concerning the extirpation, care, or treatment of animals infected with or which have been exposed to any contagious disease, such regulations shall supersede those made by the local boards of health that are inconsistent therewith, and said local board of health shall carry out and enforce all orders and directions of the State board of health to them directed.

Penalty. SEC. 7. Any person disobeying the orders of said State board of health or of said local board of health, made in conformity with the preceding provisions, or driving or transporting any animals contrary to the regulations made, recorded, and published as aforesaid, shall be punished by a fine of not less than one hundred dollars nor exceeding five hundred dollars.

Penalty for withholding information. SEC. 8. Whoever knows or has reason to suspect the existence of any such disease among the animals in his possession or under his care shall forthwith give notice thereof to the said local boards of health of the town, county, or city where such animals are kept, and for failure so to do shall be punished by a fine of not less than fifty dollars nor exceeding five hundred dollars.

Penalty for neglect of duty. SEC. 9. Any member of any local board of health who neglects or refuses to carry into effect the preceding provisions shall be punished by a fine of not less than one hundred dollars nor more than five hundred dollars for each day's neglect.

Power of board. SEC. 10. The State board of health shall have all the power and authority herein conferred upon the local boards of health, and said State board of health shall elect an executive officer, whose directions shall have the force and effect of orders and regulations of the State board.

Notice to State board of health. SEC. 11. The local boards of health, within twenty-four hours after they have notice that any domestic animals in their respective towns, counties, and cities are infected with or have been exposed to any such disease, shall give notice thereof in writing to the State board of health.

Regulations of board of health; penalty. SEC. 12. The State board of health may make all necessary regulations for the quarantine of such animals and extirpation of such disease, and may direct local boards of health to enforce and carry into effect all such regulations as may from time to time be made for that end, and any member of any local board of health who refuses or neglects to enforce or carry out any regulations of the State board of health shall be punished by a fine of not less than one hundred dollars nor more than five hundred dollars for every offense.

Slaughter of animals. SEC. 13. The State board of health, when in their judgment the public requires it, may cause to be killed and buried any domestic animals which are infected with any contagious or infectious disease, and may isolate those that have been exposed to such disease.

Slaughter of animals; compensation. SEC. 14. In all cases of contagious disease in animals the State board of health, having condemned the animal infected therewith, shall cause such animal to be killed, without an appraisal or compensation to the owner thereof.

Penalty. SEC. 15. Any person who fails to comply with the regulation made or an order given by the State board of health shall be punished by fine not exceeding five hundred dollars.

Examination of witnesses. SEC. 16. The State board of health may examine, under oath, all persons believed to possess knowledge of material facts concerning the existence or dissemination, or danger of dissemination of disease among domestic animals, and for this purpose shall have all the power vested in justices of the peace to take depositions and to compel witnesses to attend and testify. All costs and expenses incurred in producing the attendance of such witnesses shall be certified by the State board of health and paid from the treasury of the State, upon being duly audited by the State auditor: *Provided*, Cost of examination. That witnesses shall be examined in the county where the infected stock is situated. All costs and expenses incurred in producing the attendance of such witnesses shall be certified by the State board of health and paid from the treasury of the State, upon being duly audited by the State auditor.

Penalty. SEC. 17. Whoever violates any of the provisions of the preceding section shall be punished by fine not exceeding one hundred dollars and the cost of prosecution.

Records. SEC. 18. The State board of health shall keep a full record of their doings and report the same to the legislature, unless sooner required by the governor.

Requirements of board. SEC. 19. The State board of health may, by order, require any two or more local boards to act together to carry out the purposes of this act.

Approved March 20, 1895.

AN ACT providing for the creation of the office of State veterinary surgeon and defining his duties.

Be it enacted by the Legislature of the State of Washington:

Office of State veterinarian created. SECTION 1. There shall be and is hereby created the office of State veterinarian, which office shall be vested in the professor of veterinary science of the Agricultural College and Experiment Station, who shall be chosen in the same manner as other members of the faculty and station staff of said college and station, and shall serve as State veterinarian without compensation in addition to the salary paid by the college and experiment station, except as hereinafter stated, paid by the college and experiment stations. The veterinarian surgeon shall be a graduate of some regular and established veterinary college and shall be skilled in veterinary science. He shall be a member of the State board of health, which membership shall be in addition to that now provided for by law. He shall be under the direction of the president of the State Agricultural College and director of the experiment station and school of science, and perform such duties as the board of regents may prescribe. When actually engaged in the discharge of his official duties outside the said college and experiment station he shall receive, in addition to his salary, actual transportation expenses, which shall be presented to the president of the college, under oath and covered with written vouchers, before receiving the same. He shall receive as salary such compensation as the regents of the State Agricultural College may determine.

Powers of veterinarian. SEC. 2. He shall have general supervision of all contagious and infectious diseases among domestic animals within or that may be in transit through the State, and he is empowered to establish quarantines against animals thus diseased, or that have been exposed to others thus diseased, whether within or without the State, and may, with the concurrence of the State board of health, make rules and regulations such as he may deem necessary for the preservation against the spread and for the suppression of said disease or diseases, which rules and regulations, after the concurrence of the governor, shall be published and enforced, and in doing said things, or any of them, he shall have power to call on any one or more peace officers, whose duty it shall be to give him all assistance in their power.

Penalty for hindrance. SEC. 3. Any person who willfully hinders, obstructs, or resists said veterinary surgeon or his assistants, or any peace officer acting under him or them when engaged in the duties or exercising the powers herein conferred, shall be guilty of a misdemeanor and punished accordingly.

Duty of veterinarian when notified. SEC. 4. Whenever a majority of any board of health, county commissioners, city council, trustees of incorporated towns or township, whether in session or not, shall, in writing or by telegraph, notify the State veterinary of the prevalence of or probable danger from any of said diseases, he shall at once repair to the place designated in said notice and take such action as the exigencies may demand, and he may, in case of emergencies, appoint substitutes or assistants, with equal power, whose compensation shall be five dollars per day and actual traveling expenses.

Slaughter of animals. SEC. 5. Whenever, in the opinion of the State veterinary surgeon, the public demands the destruction of any such stock under the provisions of this act, he shall, unless the owners of such stock consent to such destruction, notify the governor. Unless in his judgment immediate action is necessary, the governor may appoint one or more competent veterinary surgeons to act in conjunction with State veterinary board, and no stock shall be destroyed except on written order by the State veterinary surgeon.

Cooperate with United States Government. The governor of the State, with the State veterinary surgeon, may cooperate with the Government of the United States for the objects of this act, and the governor is hereby authorized to receive and receipt for any money receivable by this State through provisions of any act of Congress which may at any time be in force upon this subject, and to pay the same into the State treasury, to be used according to the act of Congress and the provisions of this act.

Approved March 22, 1895.

TO PREVENT DISEASE AMONG SHEEP.

AN ACT in relation to and to prevent the introduction or spread of disease among sheep, and repealing "An act in relation to and to prevent the introduction or spread of disease among sheep," approved February 2, 1888, and declaring an emergency.

Be it enacted by the Legislature of the State of Washington:

Appointment of inspector. SECTION 1. That it shall be the duty of the commissioners of each county, upon the presentation to them at any regular meeting of a petition signed by three or more owners of sheep residing in said county, to appoint some suitable person, being a qualified elector of said county, as sheep inspector of said county for two years from the date of his appointment and until his successor is appointed and qualified as herein provided: *Provided*, That the county commissioners may at any time remove such sheep inspector from office and declare the said office vacant upon sufficient evidence being presented to them that such sheep inspector is unnecessary or has neglected to perform any of the duties imposed on him by this act, or is incompetent.

Bond of inspector. SEC. 2. Such person so appointed shall, before entering upon the discharge of the duties of his office, take and subscribe an oath of office and enter into a bond, with two or more sureties, approved by the county commissioners in the penal sum of \$1,000, conditioned for the faithful performance of the duties of his office.

Power of inspector. SEC. 3. Such inspector shall have the power to appoint not more than two deputies, for whose acts he shall, in all cases, be responsible, and by whom he may perform any act or duty required of him by this act; and each inspector shall be provided by the county with a seal of office, which shall be inscribed in substance as follows: "Sheep inspector of _____ County, Washington." And each official certificate or report of such inspector shall be authenticated by such seal.

Inspection before entry into State; duty of inspectors. SEC. 4. No person, company, or corporation shall bring or cause to be brought into this State any sheep or band of sheep without first, and within three months prior thereto, obtaining from a sheep inspector, duly appointed and qualified under this act, a certificate, under the official seal of such inspector, to the effect that the said sheep, or band of sheep, have been personally inspected by such inspector, and that all such sheep are sound and healthy and free from scab or scabies, or other infectious or contagious disease, and no person, company, or corporation shall move, or cause to be moved, any sheep or band of sheep from one county in this State to another county without first, and within six months prior thereto, obtaining such certificate as is above mentioned. It shall be the duty of any sheep inspector, upon the request of any person, to visit and inspect any band of sheep within his county, or within five miles of the

line of the State, unless he has inspected such band of sheep within three months prior thereto, and if, at the time of such inspection, such sheep are healthy and free from scab or scabies, and all infectious and contagious diseases, he shall issue to the owner or person in charge thereof a certificate to that effect; and if not healthy and free from scab and all contagious and infectious diseases he shall revoke any certificate which may have been issued by him, and the person holding such certificate shall forthwith, on demand, deliver the same to such inspector.

Prohibit importation from infected districts.

localities in any other State or Territory, or that conditions exist that render sheep likely to convey disease, they must thereupon, by order duly entered in their journal, designate such localities and prohibit the importation from them of any sheep into their county, except under such restrictions as are hereinafter provided.

Notify sheep inspector.

SEC. 5. Whenever the county commissioners of any county have reason to believe that any disease mentioned in this act has become epidemic in certain localities in any other State or Territory, or that conditions exist that render sheep likely to convey disease, they must thereupon, by order duly entered in their journal, designate such localities and prohibit the importation from them of any sheep into their county, except under such restrictions as are hereinafter provided.

Examination of sheep before entry to State.

SEC. 6. Upon the entry of such order of the county commissioners of any county, the owners or persons in charge of any sheep which are intended to be brought into the said county from localities in any other State or Territory against which sheep quarantine has been declared, as provided in the next preceding section, must forthwith notify the sheep inspector of said county of such intention, and such owner or person in charge shall not allow any sheep to be brought into the county until such sheep have been quarantined and inspected by the sheep inspector, as provided in the next succeeding section: *Provided*, That this section shall not apply to sheep being transported upon the railroad through the State of Washington to points beyond the limits of said State, and which are not allowed to graze upon the public range of said State while being so transported.

Unlawful importation.

SEC. 7. Upon receiving notice of the intention of the owner or person in charge of any sheep, as provided in the last preceding section, to bring such sheep into any county of this State from any quarantined district, the sheep inspector of such county shall forthwith proceed to examine and inspect such sheep before they are brought into this State, and shall cause such sheep to be kept within certain limits designated by him for a term of sixty days, and shall cause the owner or person in charge of such sheep to dip such sheep or otherwise treat such sheep for the disease prevalent in the quarantined district. If at the expiration of said time said sheep inspector shall find that said sheep are free from any contagious or infectious disease, he shall issue a certificate to the owner or person in charge of such sheep, permitting them to be brought into this State.

Restrictions on diseased animals.

SEC. 8. It is unlawful for any person to bring into this State any sheep infected with the scab or any other contagious or infectious disease.

SEC. 9. Any person, company, or corporation owning or having charge of any sheep infected with scab or any infectious or contagious disease shall keep the same, and all sheep with which such have been in contact, secure from contact with other sheep, and shall not drive or permit the same to go upon any public road or highway or any inclosed land not owned by such company, person, or corporation: *Provided*, That such sheep may be moved or driven upon such places and highways by first obtaining the written permission of the sheep inspector of the county wherein such sheep may be, which permission shall state the time within which they are to be moved, the place to and from which, and the route to be traveled.

Extent and time of inspection.

SEC. 10. It shall be, and is hereby made, the duty of each sheep inspector appointed under this act to examine, visit, and inspect every band of sheep within his county during the months of April and May of each year.

Owner notified of disease.

SEC. 11. Whenever, upon inspection of any band or herd of sheep kept or herded in any county of the State of Washington, the sheep inspector shall find such sheep, or any portion of them, affected with scab or any infectious or contagious diseases, he shall forthwith notify the owner or person in charge of such diseased sheep, in writing, to put such diseased sheep, and the band or herd in which they have been kept, into an inclosure, or by other sufficient means keep them from contact with other sheep, and to proceed immediately to treat them for the cure of such disease in some manner or by some means approved by an inspector; and any person, com-

Penalty for neglect. Any person, company, or corporation who shall neglect for ten days to put such sheep into an inclosure, or by other sufficient means secure them from contact with other sheep, or shall refuse or neglect for ten days after such notice to proceed to treat such sheep for the cure of such diseases in some manner or by some means approved by an inspector, shall be guilty of a misdemeanor, and for each day of such neglect or refusal to treat such sheep after ten days from each notice, such person or corporation shall be guilty of a separate misdemeanor, and in addition to the punishment provided in this act the inspector shall, in case of a refusal or neglect to secure such diseased sheep from contact with other sheep immediately upon notice being given as hereinbefore provided, or in case of a refusal or neglect of ten days after notice to treat such sheep for the cure of such diseases, seize such sheep, and by inclosure or other sufficient means secure them from contact with other sheep, and proceed without unnecessary delay to treat them for the cure of such disease; and the expense of such seizure, keeping, and treatment, together with the fees of the inspector while engaged therein, shall be a charge upon the sheep so seized, and the inspector shall hold the sheep until the same is paid, and if not paid within ten days after such treatment is completed, he shall collect the same, together with the costs and expenses of collection, by advertising and selling such sheep, or as many thereof as may be necessary, in the manner provided by law for the sale of personal property upon execution: *Provided*, No person, company, or corporation shall be required to dip a band of sheep between the first day of December and the first day of May.

Certificate. SEC. 12. No owner of any toll bridge or ferryboat, or person in charge thereof, shall permit any sheep to cross such bridge, or go upon such ferryboat, unless the person in charge of such sheep shall first exhibit to the person in charge of such bridge or boat a valid certificate issued by an inspector appointed under this act, to the effect that such sheep are free from scab and all other contagious and infectious diseases.

Certificate null and void. SEC. 13. Every certificate issued under this act to the owner of sheep continuously kept within this State shall be null and void after one year from the date thereof, and every certificate issued to the owner of any band or herd of sheep which are not continuously kept in this State shall be null and void after six months from the date thereof.

Salary. SEC. 14. Each inspector shall be paid three dollars per day for each day when necessarily engaged in the discharge of the duties of his office, and five cents per mile for each mile necessarily traveled by him for such purpose; and his bills for such service shall be audited and paid by the county commissioners of the county for which he is appointed.

Liability. SEC. 15. Any person, company, or corporation violating any provision of this act, or who shall fail to comply with, or who disregards any order or direction made by any sheep inspector under the provisions of this act, shall be liable in a civil action for all damages sustained by any other person, company, or corporation in consequence of such violation. Such damages shall be a lien on the sheep, which may be sold to satisfy such lien as provided by law.

Penalty. SEC. 16. Any person who fails to comply with or disregards any order or direction made by any sheep inspector under the provisions of this act, or who violates any of the provisions of this act, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than fifty dollars or more than five hundred dollars.

SEC. 17. That the act entitled "An act in relation to, and to prevent the introduction or spread of, disease among sheep," approved February 2, 1888, and all other acts and parts of acts in conflict with this act, are hereby repealed.

SEC. 18. An emergency exists, and this act shall take effect immediately.

Approved February 26, 1897.

WISCONSIN.

[Veterinary laws of the State of Wisconsin, including laws governing contagious diseases among animals. 1897.]

Appointment of veterinarian. SECTION 1492 a. SEC. 1. The governor of the State shall appoint a competent veterinary surgeon, who shall be known as the State veterinarian, said appointment to be by and with the approval of the senate, when in session, or if the senate is not in session, subject to its approval at next regular session thereafter.

Duties of veterinarian. SEC. 2. It shall be the duty of the State veterinarian to suppress and prevent the introduction or spread of contagious and infectious diseases among domestic animals; to cooperate with the State board of health in the management of such diseases as are common to man and animals, or any condition of the lower animals likely to affect the general health of mankind. He shall make scientific study and such investigations and experiments as he shall deem necessary, and he shall gather and diffuse information relative to the contagious and infectious diseases of animals.

Duties of board of health; quarantine of animals. SEC. 3. It is hereby made the duty of the various town, village, and city boards of health to take cognizance of contagious and infectious diseases among animals, and to report all cases coming under their observation to the State veterinarian. It is also made their duty to prevent the spread of such diseases and to cooperate with the State veterinarian; and the local boards of health or the health officer are authorized to order quarantine of any animal affected with contagious or infectious disease, or any animal suspected of being affected with or which has been exposed to such disease, and to forbid the removal of such animals from any premises where they may be kept. And in such cases where they are unable to determine the nature of any disease the said local boards may request the State veterinarian to make such investigation as may be necessary. Any person who shall remove or allow to be removed any domestic animal so quarantined by the local boards of health or health officers without permission from competent authority shall be guilty of a misdemeanor, and be punished therefor by a fine of not less than twenty dollars and not more than two hundred dollars, or by imprisonment at hard labor of not less than thirty days nor more than one year, and shall forfeit all right to indemnity as herein provided, and be liable to all persons injured thereby for damages by them sustained. The State veterinarian is hereby authorized, if he deem it necessary, to order quarantine of any premises upon which domestic animals are that are afflicted with contagious or infectious disease, or that are suspected to be affected with such disease, or have been exposed to contagious or infectious disease, and to forbid the removal therefrom of any animals susceptible to such disease; said order of quarantine to be in writing and served upon the owner or occupant of the premises upon which said diseased animals are, and notice thereof posted at the usual entrance to said premises; and in case said contagious or infectious disease shall become epidemic in any locality, the State veterinarian shall immediately notify the governor, who shall thereupon, if he deem it necessary, issue a proclamation quarantining said locality and forbidding the removal therefrom of any animal of the kind diseased, or any kind susceptible to such disease, without permission of the State veterinarian. Any person who shall remove or allow to be removed any domestic animal of the kind diseased or susceptible to such disease from any premises so quarantined by the State veterinarian, or locality quarantined by the proclamation of the governor, without permission of the State veterinarian, shall be guilty of a misdemeanor, and punished therefor by a fine of not less than twenty dollars nor more than two hundred dollars, or by imprisonment at hard labor not less than thirty days nor more than one year, and shall forfeit all right to indemnity as herein provided and be liable to all persons injured thereby for damages by them sustained.

Animals may be killed. SEC. 4. In case of contagious or infectious disease of malignant or very fatal nature, such as rinderpest, foot-and-mouth disease, pleuro-pneumonia, anthrax, and Texas fever among bovines, glanders among equines, anthrax in sheep, and other diseases of like nature or fatal tendency, the State veterinarian may, if in his judgment necessary, order slaughtered any diseased animal or animals, or any animal or animals which have been exposed to such contagion or infection; but in case the State veterinarian shall have any doubt concerning the nature of such disease or the advisability of adopting such means, he shall have the right to call in consultation one or two veterinary surgeons and to confer with the State board of health. He shall also have authority to order slaughtered any animal or animals he may deem necessary for the purpose of ascertaining the nature of such disease.

Appraisal of animals. SEC. 5. Whenever, as herein provided, the State veterinarian shall deem the slaughter of any animal or animals necessary, he shall notify in writing a justice of the peace of the county in which said diseased animals are, describing in said notice the diseased animals with reasonable certainty, stating the name of the owner when known. The said justice of the peace shall, after entering the same upon his docket, summon three disinterested citizens who shall not be residents of the immediate neighborhood in

which the animals are owned or kept. The said appraisers shall, before entering upon the discharge of their duties, be sworn to make a true and faithful appraisement of the value of said animals, without prejudice or favor, and said appraisers shall certify in their return that they have seen said animals destroyed, and in making the appraisement, the value put upon the animals shall be what they are worth at the time of the appraisal. If any animal be diseased at the time of the appraisement, that fact shall be taken into consideration, and the value put upon it shall be what it is worth in its diseased condition. In the case of horses afflicted with glanders, the appraised value shall in no case exceed fifty dollars. It shall be the duty of the local health officer or the chairman of the board of health to superintend the slaughter of said animal and to provide for the disposal of the carcass and disinfection of the premises. The justice of the peace, when satisfied of the fact, shall issue to the owner a certificate of slaughter, and shall state therein whether or not, in his judgment, the owner is entitled to indemnity.

Measures to prevent the introduction of disease.

SEC. 6. It shall be unlawful to bring into this State any domestic animal affected with, or that has been exposed to, any infectious or contagious disease; and whenever the State veterinarian shall have reason to believe that there is danger of the introduction into this State of contagious or infectious disease among domestic animals from localities outside the State, he shall immediately investigate, and if, in his judgment, conditions exist which endanger the health of domestic animals of this State, he shall immediately notify the governor and recommend such restrictions as he may deem necessary; and the governor shall, if in his judgment necessary, thereupon, by proclamation, designate such localities and prohibit from them the importation of any animals of the kind diseased into this State, except under such restrictions as the State veterinarian may deem proper. And any person or persons who shall knowingly bring into this State any animals affected with, or suspected to be affected with, or that has been exposed to, any contagious or infectious disease, or any person or persons who shall after the issuing of the governor's proclamation, herein provided, receive in charge any animal or animals from any one of said designated localities and transport or convey the same within the State shall be deemed guilty of a misdemeanor, and punished therefor by a fine of not less than two hundred dollars and not more than two thousand dollars, or by imprisonment at hard labor not less than six months nor more than two years in the county jail, and shall forfeit all right to indemnity, as herein provided, and be liable to all persons injured thereby for damages by them sustained. Any corporation violating any of the provisions of this section shall forfeit not less than two hundred dollars or more than two thousand dollars, and be liable to all persons injured thereby for damages by them sustained.

Existence of disease to be reported; powers of veterinarian.

SEC. 7. It shall be the duty of any person or the agent of any corporation who shall have reason to suspect that there is upon their premises any animal or animals affected with contagious or infectious disease to immediately report the same to the local board of health, whose duty it shall be to report the same to the State veterinarian, and failure to so report or any attempt to conceal the existence of such disease, or to permit any animal affected with contagious or infectious disease to run at large or associate with other animals susceptible to such disease, or to obstruct or resist the State veterinarian in the performance of his duty as herein set forth, or to sell, offer for sale, give away, or in any manner part with any animal affected with, or suspected to be affected with, or that has been exposed to, any contagious or infectious disease, and any person convicted of any of the above acts or omissions shall be fined not less than twenty and not more than two hundred dollars, or be imprisoned at hard labor not less than thirty days or more than one year for each offense, and shall forfeit all right to indemnity, as herein provided, and be liable to all persons injured thereby for damages by them sustained. The provisions of this act shall apply to all animals in this State, whether residents or in transit, and the State veterinarian is hereby authorized to enter any premises where he has reason to suspect diseased animals are confined, and he may call to his aid, when necessary, the sheriff or any constable of the county in which the diseased or infected animals are; and it is hereby made the duty of such officers to assist the State veterinarian to enforce the provisions of this act when called upon so to do.

Compensation for animals killed.

SEC. 8. All claims against the State arising from the slaughter of animals, as herein provided, shall be made by filing with the secretary of state a copy of the State veterinarian's notice to the justice of the peace, and return of the appraisers,

which notice and return shall be certified to by the justice of the peace on whose docket they are recorded. The secretary of state shall examine the same, and if satisfied that the amount awarded is just and the owner entitled to indemnity he shall issue a warrant on the State treasurer for two-thirds the sum named in the appraiser's return; but if he shall have reason to believe that the appraised value is greater than the real value of the animals he shall be authorized to settle with the owner for such less sum as he shall deem just.

Payment, when not made. SEC. 9. The right to indemnity shall not exist, and payments shall not be made in the following cases: First, for animals belonging to the United States, this State, or any city, county, township, or village in the State. Second, for animals that have been brought into the State contrary to the provisions of section 6, or where the owner or claimant shall have failed to comply with the provisions of sections 3 and 7 of this act. Third, when the owner or claimant, at the time of coming into possession of the animal, knew it to be diseased. Fourth, for animals found to have been diseased at the time of their arrival in the State. Fifth, or when the owner shall have been guilty of negligence or willfully exposing his animals to the influence of infectious or contagious diseases.

Compensation and expenses of veterinarian, of surgeons to assist, and appraisers.

SEC. 10. The State veterinarian shall receive for his services the sum of two thousand dollars per annum, and there shall be allowed for experimental purposes, by and with the consent and approval of the governor, a sum not to exceed five hundred dollars annually, and a sum sufficient to cover his actual and necessary traveling expenses; said sum for experimental purposes and traveling expenses audited, allowed, and paid by the secretary of state upon the presentation to be of an itemized statement and receipts showing the actual and necessary traveling and experimental expenses, with the governor's order of approval of experimental work. He shall also be entitled to receive the necessary postage, stationery, and usual supplies for the use of his office. He shall from time to time issue such bulletins of information as he shall deem advisable, which, together with his report to the governor, shall be printed, in such numbers as shall be necessary, by the State printer. He may deliver lectures upon veterinary science in the agricultural department of the university when the same shall not interfere with his other duties. The veterinary surgeons called in consultation shall receive the sum of seven dollars per day for each day actually employed and their necessary expenses while performing their duties. They shall be paid upon itemized vouchers certified by the State veterinarian and approved by the governor, and no person shall be considered a veterinary surgeon within the meaning of this act who is not a regular graduate in good standing of some recognized veterinary college in the United States, Canada, or Europe. The appraisers herein provided shall receive the sum of two dollars for each day actually employed as such, to be paid out of the county funds upon certificate of the justice of the peace by whom they were summoned. The justice of the peace, sheriff, and constable shall receive their fees from their respective counties, as provided by law in criminal cases.

Report. SEC. 11. The State veterinarian shall, in October of each year, make a report to the governor of the State.

Appropriation. SEC. 12. There is hereby annually appropriated, from any moneys in the treasury not otherwise appropriated, a sum sufficient to carry out the provisions of this act.

SEC. 13. Section 12 of the act of which this is amendatory is hereby declared to be made applicable to the provisions of this act.

WYOMING.

AN ACT for the appointment of sheep inspectors and to suppress and prevent dissemination of scab among sheep, and repealing all of chapter four of title fifty of the Revised Statutes of Wyoming, being sections forty-one hundred and forty-four to forty-one hundred and fifty-nine, both inclusive.

Be it enacted by the Legislature of the State of Wyoming:

Appointment. SECTION 1. The county commissioners of each county, upon the request of the president or secretary of any organized woolgrowers' association in any county in Wyoming, or of any three sheep owners in any county therein, shall appoint a capable and discreet person as sheep inspector for such

county, to hold his office during the pleasure of such county commissioners, or until his successor shall be appointed, and shall perform such duties as are hereinafter prescribed, or he shall be removed, as hereinafter provided, upon the petition of the majority of the sheep owners of any county presented to any county commissioners. It shall be the duty of such county commissioners of any county wherein such petitioners reside to remove such inspector and appoint the person named in said petition.

Qualifications of inspector. SEC. 2. Such inspector shall be a resident of the county for which he shall be appointed. He shall, before entering upon the duties of his office, take the oath prescribed by law, and shall give bond to the county wherein he is appointed in the sum of two thousand dollars, with good surety, conditional that he will faithfully perform the duties of his office. Such bond shall be approved by the county clerk and chairman of the board of county commissioners, who shall endorse upon every bond they shall approve as follows: We are acquainted with the sureties herein, and believe them to each be worth the amount of the penal sum of the within bond above their just debts and liabilities.

Record of bond of inspector. SEC. 3. Such bond, with the oath endorsed thereon, shall be recorded in the office of the county clerk of the county in which the inspector shall reside, and may be sued on by any person injured on account of the unfaithful performance of such inspector's duty: *Provided*, That no suit shall be so instituted after more than three months have elapsed from the time the cause of action accrued.

Duties of inspector. SEC. 4. It shall be the duty of each inspector so appointed and qualified to inspect all sheep within his county of which he may receive notice, as provided in section seven of this act, and in case the same be not diseased, he shall make and issue a certificate stating such fact. But if the sheep, or any of them, be diseased, the regulation for their quarantine and holding shall at once be made by such inspector, and if in his judgment it be deemed necessary he shall personally supervise the dipping of any or all scabby sheep found in the county in which he is located.

Compensation of inspector. SEC. 5. The inspector of each county shall receive for his services fifteen cents per mile for each and every mile necessarily traveled and one-half cent per head for each and every sheep inspected and five dollars per day for each and every day necessarily spent in supervising the dipping, said fees to include all traveling expenses of whatever kind or nature. He shall also receive ten per centum of all fines and penalties collected in cases in which he gives information of the offense, and his interest in the results shall not affect his competency as a witness; and all fines and penalties, except as herein provided, shall be paid into the sheep-inspection fund, as hereinafter provided.

Payment for inspecting, quarantining, and dipping. SEC. 6. Whenever any sheep are inspected, as provided for in section seven of this act and found to have the scab, all expenses for inspecting and quarantining, dipping, and all other expenses of whatever nature provided for in this act, shall be paid by the owner or owners of such sheep, and shall be a lien against any and all of such sheep. But if, on thorough inspection, no scab is found, then all expense of inspecting shall be paid from the fund known as the sheep-inspection fund, as provided for in section numbered ten of this act, and after his account for said inspection shall have been allowed by the county commissioners, [payment shall be made] in the same manner and form as claims against the county are allowed and approved by them: *Provided*, There may be money in such fund. If not, such account shall be deferred until such fund is replenished.

Quarantine; expense of dipping. SEC. 7. Upon receipt of reliable information, in writing, that any sheep in his county, are affected with scab, or have, in his judgment, been exposed to it, such inspector shall immediately examine such sheep, and if found so diseased he shall immediately quarantine them, to be held within a certain limit or place, to be defined by him, and such sheep shall be held in quarantine until the owner or owners in charge shall have eradicated such scab effectually. All expenses of dipping and taking care of all sheep in quarantine, under the provision of this act, shall be paid for by the owner, agent or person in charge of such sheep, as provided for in section six of this act.

Scabby sheep not to be moved. SEC. 8. In no case shall any scabby sheep be allowed to be removed from any place to another within any of the counties of this State, or from one county to another, or any sheep that have within six months been scabby, without a written certificate from the sheep inspector: *Provided*, Sheep may be moved to a dipping corral with the written consent of all sheep owners on the route traveled.

Penalty. Any person violating the provisions of this section shall be guilty of a misdemeanor, and, upon conviction, shall be fined not less than two hundred and fifty dollars, nor more than one thousand dollars, for each and every offense.

Owner to report to inspector on arrival in State with sheep. SEC. 9. Upon the proposed arrival of any sheep into this State, or in any county of this State, from any other State or Territory, the owner or agent in charge shall immediately report them to the inspector of the county, also by registered letter to the chairman of the board of county commissioners for such county, in this State, in which such sheep are to be first taken, of the time and place at which he proposes to bring such sheep across the State boundary line. Such sheep shall first come for inspection, and such inspector shall, as soon as possible, inspect them. And in case of failure, from any cause, of the owner or person in charge to report for inspection, such person so offending shall, upon conviction thereof, be fined in any sum not less than two hundred and fifty dollars nor more than one thousand dollars. The expenses of such inspection shall be borne by the owner of the sheep and shall be a lien on any or all such sheep. If, on inspection, said sheep are found to contain no scab, then the inspector shall make and issue a certificate to that effect, but if scab is found, then said sheep shall be subject to all the provisions set forth in section seven of this act.

Sheep-inspection fund. SEC. 10. All moneys accruing from fines and penalties as set forth in this act, shall constitute a separate fund, which shall be known as the "sheep-inspection fund," and it shall be held and used only for the purpose of the inspection of sheep, by this act provided. When said fund shall exceed the amount of two thousand dollars, all above that sum then on hand and in the county treasury shall then be transferred and become a part of the general fund of the county.

Inspection record. SEC. 11. Every inspector appointed under the provisions of this act shall keep a book, to be known as the Inspection Record, in which he shall enter and record all his official acts and proceedings. Such record shall particularly show the name of the owner of every flock of sheep inspected, when the same was inspected, the names of the persons to whom certificates have been granted, and when, and all orders and directions made in relation to any matter therein designated; and it shall be his further duty to make a statement in writing of all of his official acts to the board of county commissioners of the county for which he was appointed, on the first day of February and first of August of each year during the term of his office, which shall be placed on file for the inspection of the general public; and in case of the inspector's death, resignation, or removal, said record shall be deposited with the county clerk.

Penalty. SEC. 12. Any person who shall fail to comply with, or who shall disregard any order or direction made by any inspector, under the provisions of this act, shall, upon conviction, be fined in any sum not less than one hundred nor more than five hundred dollars.

Scabby sheep prohibited; penalty. SEC. 13. It shall be unlawful for any person or persons to bring into the State of Wyoming, from without such State, any sheep infected with scab. Every person offending shall, upon conviction thereof, be fined in any sum not less than one hundred dollars, nor more than five hundred dollars, or imprisonment in the county jail not less than one month nor more than three months, or both such fine and imprisonment, at the discretion of the court.

Appointment of second inspector. SEC. 14. Whenever in the opinion of the county commissioners of any county of this State it be necessary, or on receiving a petition from any four sheep owners of any county of this State, they shall immediately appoint the second inspector and define as near as possible the particular portion of the county in which such inspector shall perform the duties of his office; and he shall qualify and in every way be subject to the same regulations as the first one appointed, except as herein mentioned.

Penalty for annoyance. SEC. 15. Any inspector appointed under the provisions of this act who shall, under and by virtue of the powers conferred upon him by reason of such appointment, oppress, annoy, or injure any person or persons unjustly shall, upon conviction, be fined in any sum not less than one hundred nor more than five hundred dollars.

Repealing certain laws. SEC. 16. All of chapter four, of title fifty, of the Revised Statutes of Wyoming, being sections forty-one hundred and forty-four to forty-one hundred and fifty-nine, inclusive, is hereby repealed.

SEC. 17. This act shall take effect and be in force from and after its passage.

Approved January 7, 1891.

AN ACT for the appointment of sheep inspectors, prescribing their duties, fixing their compensation and the manner of the payment of the same, and providing penalties for the violation of this act, and for the repeal of chapter one hundred and twenty-five of the Session Laws of the State of Wyoming for eighteen hundred and ninety-five, entitled "An act for the appointment of sheep inspectors, and prescribing their duties and fixing their compensation and the manner of the payment of the same, and providing penalties for the violation of this act, and for the repeal of chapter thirty-one of the Session Laws of the State of Wyoming for eighteen hundred and ninety and eighteen hundred and ninety-one," approved March 2, 1895, and repealing all acts and parts of acts inconsistent with the provisions of this act.

Be it enacted by the Legislature of the State of Wyoming:

Appointment of inspector and term of office. SECTION 1. There shall be appointed by the county commissioners of each county in Wyoming, upon the petition of a majority of the citizen sheep owners of such county, taxpayers therein, a capable and discreet person and practical sheep grower as sheep inspector for such county, to hold his office during the pleasure of the board of county commissioners, or until his successor shall be appointed, and who shall perform such duties as are hereinafter provided. Such sheep inspector shall be removed upon the petition of a majority of the citizen sheep owners paying taxes in said county, presented to the board of county commissioners, and it shall be the duty of such county commissioners of any county wherein such petitioners pay taxes, upon the presentation of such petition, to remove such sheep inspector and appoint the person named in such petition.

Qualification and bond. SEC. 2. Such sheep inspector shall be a resident of the county for which he shall be appointed. He shall, before entering upon the duties of his office, take the oath prescribed by the constitution for other officers, and shall give a bond to the county wherein he is appointed in the sum of two thousand dollars, with good and sufficient sureties, conditioned that he will faithfully perform the duties of his office. Such bond shall be approved by the board of county commissioners, and the chairman of such board shall endorse upon every bond approved by such board as follows: "We are acquainted with the sureties herein and believe them each to be worth the amount of the penal sum of the within bond, over and above all their just debts and liabilities."

Disposition of bond. SEC. 3. Such bond, with the oath endorsed thereon, shall be recorded and filed in the office of the board of county commissioners of the county in which the inspector shall reside; and such bond may be sued upon by any person injured by the unfaithful performance of duty by such inspector or any of his deputies: *Provided*, That no suit shall be instituted after twelve months have elapsed from the time the cause of such action accrued.

Affidavits of sheep owners. SEC. 4. It shall be the duty of such sheep inspector to deliver to each sheep owner grazing sheep in his county, personally or by registered mail, between the fifteenth day of May and the fifteenth day of June of each year, blank affidavits. Such blank affidavits shall contain proper blank spaces in which to state the name of the owner, the paint marks or other marks of identification on each such flock of sheep, the locality where each such flock of sheep is being held for grazing, and whether any sheep in such flock are infected with scab or any other infectious or contagious disease at the time of making such affidavit; and such sheep inspector or any of his deputies are hereby authorized to administer the oath to such affidavit, or any other affidavit required by this act.

Date of filing affidavit. SEC. 5. On or before July first then next ensuing such owner or his agent shall fill out said affidavit and swear to same before some officer authorized to administer oaths in said county, and shall file such affidavit with such sheep inspector.

Penalty for neglect. SEC. 6. Any sheep owner who shall omit, neglect, or refuse to file the affidavit mentioned in section four of this act, either in person or by registered mail, with the sheep inspector of the proper county on or before July first in each year shall forfeit ten dollars for each day such failure, omission, neglect, or refusal shall continue after July first of that year, such penalty to be sued for and recovered in any court in such county, and when collected the same shall be paid to the treasurer of the county. Any failure to receive the blank shall not be an answer or defense to any suit.

Perjury. SEC. 7. If any person shall willfully swear falsely to any affidavit required by this act he shall be guilty of perjury, and upon conviction thereof he shall be punished in the manner now provided by law for the punishment of persons convicted of perjury.

Inspector to record affidavits; fee. SEC. 8. Upon receipt of such affidavit such sheep inspector shall cause to be recorded, in a book to be kept by him for that purpose, the information contained in such affidavit, which book shall at all times be opened to the inspection of all citizens of this State. Such sheep inspector shall be entitled to a fee of seventy-five cents for each affidavit so filed, to be paid by the owner of the sheep referred to therein at the time of filing the same.

When sheep to be inspected. SEC. 9. Such sheep inspector may be called upon, in writing, at any time, by one or more sheep growers owning sheep and paying taxes in such county, to inspect any band of sheep in his county. Upon such request being received by such inspector he shall forthwith proceed to inspect the sheep mentioned in such request. If he shall find them free from scab or other infectious or contagious disease the expense of such inspection shall be paid by the party making such request. If he shall find, upon such inspection, that any of such sheep are infected with scab or any other infectious or contagious disease the expense of inspection shall be paid by the owner of such sheep, and such inspector shall take the steps in relation to said sheep provided by section ten of this act.

Inspector to notify owner. SEC. 10. Whenever, upon examination by such sheep inspector, any flock of sheep kept or herded in the State of Wyoming shall be found infected with scab or any other infectious or contagious disease, or when by affidavit, as herein required, any sheep kept or herded within the State of Wyoming shall be reported as infected with scab or any other infectious or contagious disease, such inspector shall forthwith notify the owner or person in charge of such sheep, in writing, to treat said sheep for said disease as soon as possible and not later than fifteen days from the date of such notice, and within a period of not less than ten days nor more than fifteen days immediately succeeding said first dipping to again dip such sheep, and also to keep said sheep from contact with other sheep by such means as he may specify for a period of fifteen days from the time of such last dipping, and until such time as such inspector is satisfied of the complete eradication of such scab or other infectious or contagious disease; and such inspector shall then, in writing, issue a permit to the owner or controller of said sheep releasing said sheep from quarantine. And such inspector shall have the power to notify other sheep owners that such sheep are

Quarantine grounds. quarantined within certain limits, to be by him fixed and specified, and that such other sheep owners shall not enter upon such quarantine grounds with their flocks of sheep until further notice; and should any flock of sheep free from scab or other infectious or contagious disease enter or intrude upon any ground embraced within the limits set apart for such quarantine, then such sheep shall be subject to the same regulations and treatment as sheep infected with scab or other infectious or contagious disease. Such inspector shall examine and inspect such sheep within a period of from fifteen to twenty days from the time of such last dipping, and if he shall find that such sheep have not been treated for said disease, or that the same have not been kept within the quarantine limits by such inspector prescribed, then the owner or owners, or person or persons controlling said sheep, shall be guilty of a misdemeanor. In case such sheep have not been treated for said disease the inspector shall immediately

When inspector is to take possession. take possession of said sheep and treat them for said disease; and all expense for so doing, including the expenses and per diem of such inspector as hereinafter provided, for every day or part of a day in which the inspector may be engaged in treating such sheep, shall become and be a lien upon the said sheep until the

same is paid, and if the same be not paid within ten days after such treatment has been completed he shall collect the same, together with the costs and expenses of collection, by advertising and selling said sheep, or so many thereof as may be necessary, in the manner provided by law for the sale of personal property on execution. If upon examination within a period of from fifteen to twenty days from the time of the last dipping the inspector finds said sheep are still infected, he shall at once take possession of said sheep and treat them as hereinbefore specified: *Provided, however*, That no person, company, or corporation shall be required to dip a flock of ewes, or any part of them in which there are ewes with lambs, at any time from the fifteenth day of April until the first day of July in Exception. any year, nor shall any owner or owners of sheep be required to dip any of their sheep between the first day of November and the fifteenth day of April of any year, but all such sheep infected with scab must be held in quarantine and kept separate from sound sheep. It shall also be the duty of such inspector to require the owner or owners of such sheep, while held in quarantine during the above periods of exemption, to spot and hand dress all sheep in the flocks that show scab or any infectious or contagious disease with some reliable medicine; and the inspector shall have power to enforce spotting or hand dressing during the periods of exemption above referred to, the same as he has power to enforce dipping at any other period of the year.

SEC. 11. Whenever the governor of the State shall have good reason to believe that any disease covered by this act has become epidemic in certain localities in any other State or Territory, or that conditions exist that render sheep liable to convey disease, he shall thereupon by proclamation schedule such localities and prohibit the importation from them of any sheep into this State, except under such restrictions as he may deem proper or as may be provided by this act. Any person, company, or corporation who after publication of such proclamation shall knowingly receive in charge any sheep from any of the prohibited districts and transport and convey the same within the limits of any county of this State shall be deemed guilty of a misdemeanor, and further, shall become liable for any and all damages and loss that may be sustained by any person or persons by reason of the importation or transportation of such prohibited sheep: *Provided, however*, That nothing herein contained shall prohibit the transportation of sheep from such districts through the State by railroad train under such restrictions and regulations as the governor may prescribe.

SEC. 12. Any person, company, or corporation intending to bring or cause to be brought from any other State or Territory into any county of the State of Wyoming any sheep must first obtain from the inspector appointed under this act of the first county into which he shall intend to bring said sheep a certificate that said sheep are sound and free from all scab or other infectious or contagious disease before crossing the boundary line of the State and county. It shall be the duty of every inspector, at the request of any person, company, or corporation or association desiring or intending to bring said sheep into this State from any other State or Territory, upon being tendered the amount of his fees for special examinations, as hereinafter provided, to with all convenient speed examine any sheep he shall be so requested to examine, and if such sheep be found to be free from scab or other infectious or contagious disease and are perfectly sound such inspector shall give his certificate in writing to such applicant over his official signature setting forth the soundness and freedom of such sheep from disease, and he shall issue a permit for such sheep to be brought into the State. And no sheep shall be brought into this State except as hereinafter provided without first obtaining such certificate and permit: *Provided, however*, That any sheep that have been previously examined by any of the inspectors of this State may return at any time within five months after the date of the certificate of the examination of such sheep, provided such sheep have not been grazing within any district scheduled by the governor by his proclamation, as hereinbefore provided, without additional examination except in the event that a complaint be made against such sheep as hereinbefore provided: *And provided*, That nothing in this act shall apply to sheep brought into this State from other States for the purpose of being dipped, sheared, or for the purpose of being shipped on the railway when said sheep do not encroach within the State a distance to exceed six miles from the boundary line of this State, and when said sheep do not remain within this State a longer period of time than is necessary to complete the operation of such dipping, shearing, or shipping: *And provided further*, That

this section shall not apply to sheep brought into this State for stock purposes from the East, except in the event that the governor shall have issued his proclamation against the State from which the same shall come, in which event such

Place of treatment. sheep last mentioned shall be treated at the point to which they are consigned by railroad, the expense of such inspection and examination and of any treatment of said sheep to be paid by the owner or person in charge of such sheep. The governor shall have the power to regulate the inspection of sheep coming into this State from any other State or Territory in any manner he may see fit, whenever he shall have issued his proclamation as

Penalty. hereinbefore provided, wherever such sheep may have come from. Any person violating the provisions of this section shall be deemed guilty of a misdemeanor.

SEC. 13. Whenever any inspector shall examine any flock of sheep and find them wholly sound and free from scab and all other infectious or contagious disease, he shall give the owner or controller thereof a certificate, in writing, showing the date of such examination or inspection, the brand or paint mark on the sheep so inspected, and the fact that such sheep so inspected and examined are wholly sound and free from all scab or other infectious or contagious disease, which certificate shall be good in any county in this State into which such sheep shall be brought, and the same shall not be further inspected or examined unless a complaint be made against the same, as provided in section nine of this act.

SEC. 14. Any person, company, corporation, or association desiring to move his or their sheep which are not sound, or which are infected with scab or any infectious or contagious disease, shall obtain from the inspector a traveling permit, but such permit shall only be granted for the purpose of moving said sheep to the nearest place where they may be treated for said disease, and by such route as such inspector shall designate. No such sheep shall be moved until such permit shall have been obtained. Any person, company, corporation, or association who shall violate the provisions of this section shall be deemed guilty of a misdemeanor, and any party injured or damaged by reason of the moving of said sheep shall be entitled to recover from said person, company, corporation, or association by civil action the amount of damage that said party may have sustained by reason thereof.

Civil action for damages. **SEC. 15.** It shall be the duty of every person or persons owning or having under his control any sheep or flocks of sheep which have become infected with scab or other infectious or contagious disease to forthwith report such fact, in writing, to the inspector of the county in which such sheep are being grazed. And if any such person shall fail, neglect, omit, or refuse to so report such fact for the period of fifteen days, such person shall be guilty of a misdemeanor. Upon receiving such notice, the inspector shall proceed as provided in section ten of this act. Any person, company, corporation, or association violating any of the provisions of this section shall be liable in a civil action for the damages sustained by any other person, company, corporation, or association in consequence of such violation.

Liability of owner, herder, or agent. **SEC. 16.** In any action or proceeding, civil or criminal, arising under this act, all persons having an interest in sheep and controlling the same, concerning which such action or proceeding is had, shall be deemed the owner of such sheep and shall be liable severally and jointly for a violation of this act. Any herder or other person in charge of sheep who will wilfully refuse to give an inspector information as to the condition of sheep in his charge shall be guilty of a misdemeanor. In criminal actions against corporations or individuals under this act no arrests shall be necessary, but a summons containing notice of the time and place of trial, together with a copy of the complaint filed before a justice of the peace, or in the court in which the action is commenced, shall be served in the same manner and for the length of time provided by law for the service of summons in civil action.

Civil action no bar to criminal. **SEC. 17.** The provisions of this act requiring the sheep inspector to prosecute for violation of its provisions shall not be construed so as to prevent such prosecutions from being commenced and prosecuted by other persons as criminal actions are commenced and prosecuted in other cases.

Deputy inspectors. **SEC. 18.** Such sheep inspector is hereby authorized and empowered to appoint one or more deputy sheep inspectors, who shall each take the same oath and give the same bond, which shall be approved

in the same manner as the oath and bond of the sheep inspector, as provided in section two of this act. Such deputy sheep inspectors shall be at all times under the direction and control of the sheep inspector, and shall report all their official acts and doings to him.

Compensation. SEC. 19. Such sheep inspector shall be entitled to receive the sum of five dollars for each and every day and part of a day employed in the discharge of his duties, together with his actual and necessary traveling expenses incurred in the performance thereof, to be paid as follows:

Fees. For services performed under the provisions of section nine of this act he shall be paid as therein provided; and for all examinations and inspections in which he shall find scab or other infectious or contagious diseases among the sheep so examined and inspected he shall be paid by the owner or controller of such sheep, and his per diem and expenses shall be a lien upon such sheep until the same are paid. And he shall be authorized to collect the same in the manner provided in section ten of this act. For all examinations and inspections of sheep coming into this State under the provisions of section twelve of this act he shall be paid by the person at whose request such examination or inspection was made the following fees, to wit: Five dollars per day for each day necessarily spent in making such inspection, and one-fourth of a cent per head for each sheep in the flock or flocks so inspected, and said fees shall be a lien on the sheep so inspected.

Of deputy inspectors. SEC. 20. Deputy sheep inspectors shall be entitled to receive the same compensation as sheep inspectors, which shall be paid and secured to him [them] in all respects as herein provided for the compensation to be paid inspectors.

Inspection record book. SEC. 21. Every sheep inspector shall keep a book, in addition to the book required by section eight of this act, to be known as the "Inspection Record," in which he shall enter and record all his official acts and proceedings and all the official acts and proceedings of his deputies. Such record shall show the name of the owner of every flock of sheep inspected, when the same was inspected, the brand or paint mark on the sheep, the result of the inspection, the names of the persons to whom certificates and permits have been granted, and the date and nature of each of the same, and any and all orders and directions made by such inspector or deputy inspector in relation to any of the matters in this act specified. And each of said books shall be a public record and shall be open to examination by any citizen at any time, and the same shall be turned over by such inspector to his successor in office.

Stationery. SEC. 22. It shall be the duty of the board of county commissioners of the several counties of this State to furnish to such inspectors all the books, blanks, and other stationery necessary to carry into effect the provisions of this act.

Penalty. SEC. 23. All misdemeanors under sections ten, fourteen, fifteen, and sixteen of this act shall be punishable by a fine of not less than twenty-five dollars nor more than one hundred dollars, and all misdemeanors under sections eleven and twelve of this act shall be punishable by a fine of not less than five hundred nor more than two thousand dollars, and all such fines, when collected, shall be paid into the treasury of the county.

SEC. 24. Chapter one hundred and twenty-five of the Session Laws of eighteen hundred and ninety-five, entitled "An act for the appointment of sheep inspectors, and prescribing their duties, and fixing their compensation, and the manner of payment of the same, and providing penalties for the violation of this act," approved March 2, A. D. 1895, is hereby repealed.

SEC. 25. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

SEC. 26. This act shall be in effect from and after its passage.

Approved March 1, 1897.

7204—34

NATIONAL AND STATE DAIRY LAWS.

Special effort has been made to have this collection of laws include all laws now operative which refer to dairy products or their imitations. In each case the names of the acts and the abstract made from them have been submitted to the State officer specially charged with their enforcement, or, where there is no such officer, to the secretary of state, with the request that the statements be corrected if necessary, indorsed, and returned. Replies were received from nearly every State and Territory. In a few cases, where no returns were made by State officers, the matter was referred to a prominent citizen interested in dairying or to an officer of a dairy association. No reply has been received from Nevada or Utah.

In a few instances it has been discovered that laws of a general nature referring indirectly to dairy products, as some public health laws, which were not noted in the statements submitted, are operative, and they have been included. It is not unlikely that some such laws are still missing, as occasionally it is a difficult matter to decide whether or not a general food law should be included when it is known it is not enforced, so far as dairy products are concerned.

In the arrangement of the table and abstracts, the following order has been followed, viz: State dairy officials, milk, butter, cheese, imitation butter, imitation cheese, miscellaneous, pure food. For obvious reasons it is not always possible to arrange the full laws in the same order.

The laws of some States are very bulky, for the reason that old laws are not repealed or entirely replaced by later legislation. For example, there may be a long law on imitation butter and cheese; later a more stringent law on imitation butter is passed, but the old law remains because of the comparatively small part of it which refers to imitation cheese. Or an act is passed which covers practically the same ground as an earlier act, but a comparatively unimportant feature is not included or repealed, and on this account it is necessary to print both laws in full.

It is hoped this compilation and the abbreviated statements will be of use where new dairy legislation is needed as well as where dairy laws now on the statute books are not as generally known as they should be.

R. A. PEARSON,
Assistant Chief of Dairy Division.

PRINCIPAL SUBJECTS ON WHICH DAIRY LAWS HAVE BEEN ENACTED IN THE UNITED STATES AND CANADA.

[Figures in the first column give the pages of this volume where brief abstracts of the laws may be found; figures in other columns refer to the pages where may be found the laws in full on the subjects named at the heads of the columns. D.= Defined only. P.= Must be colored pink. A plus mark (+) following a page number signifies "and following page or pages."]

States	Page of abstract.	State dairy commis- sioner or similar offi- cer.	Milk.				Butter.		Cheese.		Imitation butter (in- cluding oleomargarine).				Imitation cheese (in- cluding filled cheese).				Miscellaneous.			General pure-food law.	
			Standard pre- scribed.	Skim milk regu- lated.	Condensed milk regulated.	Impure milk re- stricted.	Other milk laws.	Defined or stand- ard fixed.	Other butter laws.	Defined, standard or prescribed or grades estab- lished.	Registered brands provided.	Other cheese laws.	Prohibited.	Yellow color pro- hibited.	Label on packages of or notice of use required.	Other laws.	Prohibited.	Yellow color pro- hibited.	Label or notice re- quired.	Other laws.	Care of cows reg- ulated.		Testing and pay- ing for milk reg- ulated.	Other miscellane- ous laws.
United States		534					568+			563													
Alabama		535																					
Arizona		535																					
Arkansas		535																					
California		535																					
Colorado		536																					
Connecticut		536																					
Delaware		537																					
District of Colum- bia		537																					
Florida		537																					
Georgia		537																					
Idaho		538																					
Illinois		538																					
Indiana		538																					
Iowa		539																					
Kansas		539																					
Kentucky		539																					
Louisiana		540																					
Maine		540																					
Maryland		540																					
Massachusetts		541																					

Michigan	542	608+	615	615	613+	612	613	615	616	617	612	614	611+
Minnesota	543	610+	620	620	617+	619	619	618	622	622+	619	618+	618+
Mississippi	544											624	624
Missouri	544											624	624
Montana	544											624	624
Nebraska	544											624	624
Nevada	545											624	624
New Hampshire	545											624	624
New Jersey	546											624	624
New Mexico	546											624	624
New York	547											624	624
North Carolina	548											624	624
North Dakota	548											624	624
Ohio	548											624	624
Oklahoma	550											624	624
Oregon	550											624	624
Pennsylvania	550											624	624
Rhode Island	551											624	624
South Carolina	552											624	624
South Dakota	552											624	624
Tennessee	552											624	624
Texas	553											624	624
Utah	553											624	624
Vermont	553											624	624
Virginia	553											624	624
Washington	554											624	624
West Virginia	554											624	624
Wisconsin	555											624	624
Wyoming	555											624	624
Canada	555											624	624

ABSTRACTS OF DAIRY LAWS.

In the following abstracts it is aimed to state briefly the principal features of the dairy laws, omitting matters of minor interest, as references to penalties, details of enforcement, disposition of fines, etc.

States having dairy commissioners or other officers specially charged with the enforcement of dairy laws, usually give such officers necessary authority for securing evidence, having analyses made, and conducting prosecutions; it is also customary to allow them necessary traveling expenses in addition to the regular salary.

When a subject is followed by the words "No law" it should be understood there is no *special* law on that subject. It may, however, be covered by a pure-food law, an abstract of which is given in another place.

UNITED STATES.

Milk. Import duty on fresh milk, 2 cents per gallon. *Condensed Milk.*—Import duty on preserved, condensed, or sterilized milk, 2 cents per pound.

Butter. Butter is defined as the food product usually known as butter and made exclusively from milk or cream, with or without salt or color. Import duty, 6 cents per pound.

Cheese. Cheese is defined as the food product known as cheese and made exclusively from milk or cream, with or without coloring matter. Import duty, 6 cents per pound.

Oleomargarine and filled cheese. Special taxes are imposed upon manufacturers, wholesale dealers, and retail dealers. Each original package must bear a prescribed label. Regulations concerning reports, etc., of manufacturers and branding of all packages not provided for by the law are made by the Commissioner of Internal Revenue. *Oleomargarine.*—Oleomargarine is defined as certain (enumerated) manufactured substances, extracts, mixtures, and compounds, including such mixtures and compounds with butter, made in imitation of butter and intended to be sold for butter. Taxed 3 cents per pound. Import duty 6 cents, and internal-revenue tax on imported oleomargarine, 15 cents per pound. *Filled cheese.*—Filled cheese is defined as substances made from milk or skimmed milk with admixture of butter, oils, or compounds foreign to such milk, and made in imitation of cheese. Taxed 1 cent per pound. Import duty, 6 cents, and internal-revenue tax on imported filled cheese, 8 cents per pound. Original packages shall be plainly branded "Filled cheese," and signs must be displayed where sales are made.

Miscellaneous. Import duty on sugar of milk, 5 cents per pound.

ALABAMA.**Milk.** (No law.)**Butter.** (No law.)**Cheese.** (No law.)

Imitation butter. No article which is in imitation of pure yellow butter and is not made wholly from pure milk and cream shall be manufactured, sold, or used in any public eating place, hospital, or penal institution, etc.; but oleomargarine, free from color or other ingredient to cause it look like butter, and made in such manner as will advise the consumer of its real character, is permitted. It must be stamped with its name.

Imitation cheese. (No law.)**Miscellaneous.** (No law.)**ARIZONA.**

(No dairy laws.)

ARKANSAS.**Milk.** (No law.)

Butter. Butter is defined as a product manufactured exclusively from milk and cream.

Cheese. (No law.)

Imitation butter. Substitutes for butter, whether in wholesale or retail packages, shall be plainly labeled "Adulterated butter," "Oleomargarine," or such other name as shall properly describe them. In hotels, etc., dishes containing said articles must be plainly marked in same manner.

Imitation cheese. (No law.)**Miscellaneous.** (No law.)**CALIFORNIA.**

Dairy bureau. Three resident citizens, experienced in manufacture of dairy produce, constitute a State dairy bureau. Period of office four years; no compensation. Issue and record cheese brands. Their agent receives \$1,200 salary and is allowed assistants and chemists when necessary. Annual appropriation for bureau, \$5,000.

Milk. (No law.)**Butter.** Roll butter when sold must be full weight.

Cheese. All cheese must be branded "California full cream cheese," if it is made from pure whole milk and contains at least 30 per cent fat; "California half-skim cheese," if made from pure milk and has at least 15 per cent fat; "California skim cheese," if made from pure skim milk. Fancy cheeses are excepted.

Imitation butter and cheese. Imitation butter and cheese is defined as any article not produced from pure milk or cream, salt, rennet, and harmless coloring matter, which is in semblance of butter or cheese and designed as a substitute for such. Shall not be colored to imitate butter or cheese, and must be in such form as will advise consumer of its real character. Every package must be plainly marked "Substitute for butter," or "Substitute for cheese," and accompanied by a statement giving name of manufacturer, ingredients, etc., a copy of which must be given to each purchaser, with verbal notice, at the time of sale, in connection with which words like "creamery," "dairy," etc., are prohibited. Patrons of eating places shall be notified if substitutes of butter or cheese are used. Prohibited in State charitable institutions.

Miscellaneous. (No law.)

COLORADO.

Dairy commissioner. The dairy commissioner, appointed by the governor, shall be a practicable dairyman; period of office two years; salary \$1,200. May employ a deputy at salary of \$1,000 per year and a chemist at \$10 per day. Issues cheese brands. State appropriation \$2,000 per annum for 1895 and 1896.

Milk. (No law.)

Butter. (No law.)

Cheese. All cheese must be branded "Colorado full cream cheese," if not less than 85 per cent of total solids consists of butter fat; all containing less than this amount of fat, "Skim cheese."

Imitation butter and cheese. All articles not produced from pure milk or cream, in imitation of pure cheese or yellow butter, are prohibited; but oleomargarine and filled cheese are permitted if free from color or other ingredient to cause them to look like butter or cheese; they must be made in such form and sold in such manner as will advise the consumer of their real character. Cheese containing any foreign fats, oleaginous substances, rancid butter, etc., shall be branded "Imitation cheese."

Miscellaneous. (No law.)

CONNECTICUT.

Dairy commissioner. The dairy commissioner is appointed by the governor; period of office, two years; salary, \$1,500 per year. He may appoint a deputy at salary of \$1,200 per year. Issues signs to dealers in imitation butter. Office expenses limited to \$900 per year. Two thousand five hundred dollars annually appropriated to the Connecticut Agricultural Experiment Station to carry out the provisions of the pure-food act.

Milk. Connecticut Agricultural Experiment Station may fix standard. *Skimmed milk.*—Skimmed milk must be plainly labeled. *Adulterated milk.*—The sale or delivery of adulterated, tainted, or diseased milk to a butter or cheese factory is prohibited.

Butter. Tub butter in prints, pats, etc., must be labeled "Tub butter."

Cheese. (No law.)

Imitation butter. Imitation butter, defined as any article resembling butter in appearance and not made wholly, salt and coloring matter excepted, from cow's milk, is prohibited; but oleomargarine or imitation butter, free from color or other ingredient to cause it to look like butter, and made in such form and sold in such manner as will advise consumer of its real character, is permitted. Words like "butter," "dairy," etc., shall not form a part of its name or appear on its package. Imitation butter shall be sold only in labeled packages, or registered places which display signs, and purchasers shall be informed orally of the character of the article at the time of sale. Use of imitation butter in public eating places, bakeries, etc., must be made known by signs.

Imitation cheese. (No law.)

Miscellaneous. (No law.)

Pure food. Any article of food or drink is deemed adulterated if any inferior or injurious substance has been added to it, if any valuable constituent has been removed, if it is an imitation of or sold as another article, if it is colored to conceal inferiority, if it contains any preservative not known to the purchaser, if it is decomposed or diseased, or the product of a diseased animal, etc., with certain exceptions, such articles are prohibited.

DELAWARE.

Milk. (No law.)

Butter. (No law.)

Cheese. (No law.)

Imitation butter and cheese. The manufacture or sale of any article not produced from unadulterated milk or cream, which is in imitation of pure yellow butter or designed to take the place of pure cheese, is prohibited; but oleomargarine is permitted if in a distinct form, free from butter color and sold in such manner as to show its real character; it shall be plainly marked "Oleomargarine."

Miscellaneous. (No law.)

DISTRICT OF COLUMBIA.

Milk. Milk standard, 9 per cent solids not fat, $8\frac{1}{2}$ per cent fat. Permit to sell milk must be obtained from health officer. *Skimmed milk.*—Skim-milk standard, 9.3 per cent total solids. Must be plainly marked "Skim milk." *Adulterated milk.*—Diseased and unwholesome milk is prohibited. *Cream.*—Cream standard, 20 per cent fat.

Butter and cheese. Butter and cheese shall be made exclusively of milk or cream, with or without common salt. Butter standard, 83 per cent fat and not more than 12 per cent water or 5 per cent salt.

Imitation butter and cheese. Substances in semblance of butter or cheese, not made exclusively of milk or cream, but with the addition of melted butter or any oil, shall be plainly branded on each package "Oleomargarine," and a label, similarly printed, must accompany each retail sale.

Miscellaneous. Health officer's regulations govern dairies and sale of milk.

Pure food. Any food or drink is deemed adulterated if any inferior or injurious substance has been mixed with it, if any valuable constituent has been removed, if it is an imitation of or sold as another article, if it is decomposed or diseased, if it is colored to conceal inferiority, etc.: with certain exceptions, which shall be made known to the purchaser, such articles are prohibited.

Milk. (No law.)

FLORIDA.

Butter. (No law.)

Cheese. (No law.)

Imitation butter. The sale of any spurious preparation, purporting to be butter, is prohibited. Guests at hotels, etc., must be notified if oleomargarine or other spurious butter is used.

Imitation cheese. (No law.)

Miscellaneous. (No law.)

GEORGIA.

Milk. Milk standard, $3\frac{1}{2}$ per cent fat, $8\frac{1}{2}$ per cent solids not fat. *Skimmed milk.*—Skimmed milk is defined as milk below the standard. *Adulterated milk.*—The sale of adulterated, impure, or diseased milk is prohibited.

Butter. (No law.)

Cheese. (No law.)

Imitation butter and cheese. Imitation butter and cheese are defined as any article not produced from pure milk or cream—salt, rennet, and coloring matter excepted—in semblance of butter or cheese and designed to be used as a substitute for either. Shall not be colored to resemble butter or cheese. Every package must be plainly marked "Substitute for butter" or "Substitute

for cheese," and each sale shall be accompanied by verbal notice and by a printed statement that the article is an imitation, the statement giving also the name of the producer. The use of these imitations in eating places, bakeries, etc., must be made known by signs.

Miscellaneous. (No law.)

IDAHO.

Milk. (No law.)

Butter. (No law.)

Cheese. (No law.)

Imitation butter. Brand required for sale of oleomargarine or butterine, imitation butter, or mixture imitating butter. These shall not be sold as butter.

Imitation cheese. (No law.)

Miscellaneous. (No law.)

Pure food. The adulteration of any article of food or drink with fraudulent intent, or sale of same as unadulterated, is a misdemeanor.

ILLINOIS.

Milk. Cans and vehicles used in the retail trade of milk shall be marked with the dealer's name and the locality whence milk comes. *Skimmed milk*.—Skimmed milk may be sold as such, and each can or vessel shall be plainly marked "Skimmed milk." *Adulterated milk*.—The sale of adulterated or diseased milk, or its delivery to a factory, is prohibited. Adulteration after delivery to a factory is a misdemeanor. *Condensed milk*.—The addition of sugar to condensed milk is permitted.

Butter. (No law.)

Cheese. (No law.)

Imitation butter. Imitation butter is defined as any article not produced from pure milk or cream—salt, rennet, and coloring matter excepted—in semblance of butter and designed to be used as a substitute for it. Shall not be colored to resemble butter. All packages must be plainly branded "Oleomargarine," "Butterine," "Substitute for butter," or "Imitation butter." Each sale shall be accompanied by notice to the purchaser that the substance is imitation butter.

Imitation cheese. Imitation cheese must be distinctly marked with the true and appropriate name of the article, and label bearing such name must be delivered with same when sold.

Miscellaneous. Care and food of dairy cows regulated. Cooperative creameries and butter factories shall give bond in the penal sum of \$6,000 and keep a monthly report of their operations posted conspicuously in factory for the inspection of patrons. The State's attorney is charged with the law relating to "Substitutes for butter."

INDIANA.

Milk. *Adulterated milk*.—The sale of adulterated, diseased, etc., milk to anyone or its delivery to a factory is prohibited.

Butter and cheese. The use of poisonous or deleterious substances in the manufacture of butter and cheese is prohibited.

Imitation butter. Butter other than that made from pure milk, when sold or used in hotels, etc., must be plainly labeled "oleomargarine."

Imitation cheese. (No law.)

Miscellaneous. (No law.)

IOWA.

Dairy commissioner. The dairy commissioner is appointed by the governor; shall have practical knowledge of dairying; term of office, two years; salary, \$1,500 per annum; shall give bond for \$10,000. He may employ clerical help at \$75 per month and an agent at \$3 per day in each city of over 10,000 inhabitants to collect milk samples; shall issue permits to milk dealers and keep a record of same; shall furnish certified test bottles to creameries. In addition to the regular appropriation, an appropriation of \$3,900 is made for the conduct of the office.

Milk. Milk standard, 12½ per cent solids, 3 per cent fat. Milk dealers in cities shall register with the dairy commissioner and receive permits from him.

Skimmed milk.—Skimmed milk may be sold as such. **Cream.**—Standard 15 per cent fat. **Adulterated milk.**—The sale of adulterated, unwholesome, and diseased milk, or delivery to a factory, is prohibited.

Butter. (No law.)

Cheese. **Skimmed-milk cheese.**—Skimmed-milk cheese shall be plainly marked.

Imitation butter and cheese. Imitation butter or cheese is defined as any article not produced from pure milk or cream—salt, rennet, and coloring matter excepted—in semblance of butter or cheese and designed to be sold as a substitute for either of them. Shall not be colored to resemble butter or cheese. Every package shall be plainly marked “Substitute for butter” or “Substitute for cheese,” and each sale shall be accompanied by a verbal notice and by a printed statement that the article is an imitation, the statement giving also the address of the maker. The use of these imitations in hotels, bakeries, etc., must be made known by signs.

Miscellaneous. Tests of milk in factories, etc., must be accurate. Persons engaged in dairying shall keep their premises in hygienic condition and shall report statistics, etc., to the dairy commissioner. Care of cows is regulated.

KANSAS.

Milk. **Adulterated milk.**—The sale of adulterated, skimmed, tainted, or diseased milk, or its delivery to any butter or cheese factory, is prohibited.

Butter. (No law.)

Cheese. (No law.)

Imitation butter. (No law.)

Imitation cheese. (No law.)

Miscellaneous. (No law.)

Pure food. Any article of food or drink is deemed adulterated if any injurious or inferior substance has been added to it, if any valuable constituent has been removed, if it is an imitation of or sold as another article, if it is diseased or tainted, if it is colored to conceal inferiority. With certain exceptions, which must be plainly labeled, such articles are prohibited.

KENTUCKY.

Milk. **Skimmed milk.**—Skimmed milk shall not be sold with intent to defraud. **Adulterated milk.**—Adulterated milk, or milk from a diseased animal or an animal fed on “brewers’ slop,” etc., shall not be sold or used in the manufacture of butter or cheese.

Butter. (No law.)

Cheese. (No law.)

Imitation butter. Oleomargarine, butterine, or kindred compound, made in such form and sold in such manner as will advise the customer of its real character, and free from color or other ingredient to cause it to look like butter, is permitted.

Imitation cheese. (No law.)

Miscellaneous. (No law.)

Pure food. An article of food or drink is deemed adulterated if any inferior or injurious article has been added to it, if it is an imitation of or sold as another article, if it is colored to conceal inferiority, if it is diseased or decomposed, etc. Such articles are prohibited. Inspections and analyses are made under the supervision of the Kentucky Experiment Station. Falsely branding products to be sold is prohibited.

LOUISIANA.

Milk. (No law.)

Butter. (No law.)

Cheese. (No law.)

Imitation butter. Such substances as oleomargarine, butterine, bogus butter, etc., shall be plainly labeled to indicate their composition. They shall not be sold as butter.

Imitation cheese. (No law.)

Miscellaneous. (No law.)

MAINE.

Milk. Milk standard, 12 per cent solids, 3 per cent fat. *Skimmed milk.*—Skimmed milk must not be sold as pure milk. *Adulterated milk.*—Sale of adulterated and diseased milk, and that from cows fed on distillery or brewery refuse, etc., is prohibited.

Butter and cheese. Butter and cheese are defined as the products usually so called, and manufactured exclusively from milk or cream, with salt and rennet, and with or without coloring matter.

Imitation butter and cheese. Any article in imitation of yellow butter or cheese and not made exclusively of milk or cream is prohibited.

Miscellaneous. All glassware used for testing milk delivered at factories must be tested for accuracy under the direction of the director of the experiment station. Specific gravity of sulphuric acid used in testing milk or cream must be at least 1.82. Persons using the Babcock test for apportioning the value of milk or cream must hold a certificate from the superintendent of the dairy school of the State College of Agriculture.

Milk inspectors shall be appointed in towns of more than 3,000 inhabitants, and may be appointed in smaller towns. They are given special powers for making inspections, and are required to keep a record of the names and addresses of all dealers.

MARYLAND.

Milk. (No law.)

Butter. (No law.)

Cheese. Cheese made from pure skimmed milk is permitted.

Imitation butter and cheese. The manufacture, sale, or use in public eating places of any article in imitation of and designed to take the place of pure butter or cheese, and not made wholly from milk or cream, is prohibited. Mixtures of any animal fats or animal or vegetable oils with milk, cream, or but-

ter shall be uncolored, and marked with names and percentages of adulterants, and this information shall be given to purchasers.

Miscellaneous. The mayor and city council of Baltimore shall make regulations for the sale, and provide by ordinance for the inspection, of milk and food products; shall provide for and fix compensation of inspectors and analysts.

State board of health is given special powers and assistance to detect and expose adulterations and corruptions of foods and to conduct prosecutions. Two thousand five hundred dollars is annually appropriated for making chemical and scientific examinations of suspected foods and drinks.

Pure food. Diseased, corrupted, or unwholesome milk or other foods shall not be sold. Mixing or coloring any article of food or drink with any ingredient for gain, unless same is handled under its true name and its package is plainly marked, etc., is prohibited.

MASSACHUSETTS.

Dairy bureau. The governor shall appoint three members of the board of agriculture to constitute a dairy bureau; term of office, three years; compensation, \$5 per day of actual service. Secretary of board is executive officer of the bureau, and receives therefor \$500 per annum in addition to salary from board. Governor may appoint an assistant to the secretary; salary, \$1,200 per annum. Agents, assistants, experts, etc., may be employed when necessary. Expenditures limited to \$7,000 a year.

Milk. Milk standard in April, May, June, July, and August, 12 per cent total solids—9 per cent solids not fat, 3 per cent fat; in other months, 13 per cent total solids—9.3 per cent solids not fat, 3.7 per cent fat. Milk dealers are registered and peddlers are licensed. *Skimmed milk.*—Skimmed milk includes that below the standard for pure milk. It must contain at least 9.3 per cent solids not fat, and be plainly marked "Skimmed milk." *Condensed milk.*—Condensed milk must be labeled with name of manufacturer; if in hermetically sealed packages, brand and contents must be given. *Adulterated milk.*—The sale of adulterated, diseased, or poor milk or its delivery is prohibited. Convictions for selling adulterated milk are advertised in the newspapers.

Butter and cheese. For the purpose of an early act, butter and cheese are defined as products usually known by these names and made exclusively from milk or cream, with salt or rennet, and with or without coloring matter.

Imitation butter. An article made wholly or partly out of any fat or oil, etc., not from pure milk or cream, and which is in imitation of yellow butter, is prohibited; but oleomargarine, free from color or other ingredient to cause it to look like butter, and made in such form and sold in such manner as will advise the consumer of its real character, is permitted. It shall not be sold as butter, nor shall words like "dairy," "creamery," etc., or the name of any breed of dairy cattle, be used in connection with it. All packages exposed for sale must be plainly marked "Oleomargarine," and labels similarly marked must accompany retail sales. Stores where it is sold and wagons used for delivery must display signs, and hotels, etc., using it must notify guests. Persons selling oleomargarine must be registered and conveyers licensed.

Imitation cheese. All articles in imitation of or intended as substitutes for cheese, not made exclusively of milk or cream, etc., must be plainly marked "Imitation cheese." Labels similarly marked must accompany retail sales.

Miscellaneous. Milk inspectors are appointed by the mayor and aldermen of cities and selectmen of towns. They are charged also with the inspection of imitation butter and cheese. Feeding garbage to milch cows is prohibited.

MICHIGAN.

Dairy and food commissioner. The dairy and food commissioner is appointed by the governor; term of office, two years; salary, \$1,200 per year; must give bonds for \$10,000; shall appoint a deputy commissioner at \$1,000 and a chemist at not more than \$1,200 per year, and may appoint two clerks at \$60 per month each, six inspectors at \$3 per day, and an assistant chemist at \$1,000 per year. Authority extends to all food and drink products. Commissioner shall make detailed annual reports to the governor and issue popular monthly reports on foods, adulterations, etc. Annual appropriation, \$18,000.

Milk. Milk standard, 12½ per cent total solids, 8 per cent fat, specific gravity between 1.029 and 1.033. *Skimmed milk.*—The specific gravity of skimmed milk must be between 1.032 and 1.037. It may be sold for what it is from cans plainly labeled "Skimmed milk." *Adulterated milk.*—The sale of adulterated, diseased, etc., milk to any person or its delivery to a factory is prohibited; milk from sick cows or those fed on distillery refuse, etc., is forbidden.

Imitation butter and cheese. Imitation butter and cheese shall not contain any poisonous or deleterious substance. Proprietors of butter and cheese factories purchasing milk from more than three persons shall register with the dairy and food commissioner. A registered brand, with a suitable device, and the words "Michigan full-cream cheese," for use on full-cream cheese and their packages will be furnished for \$1 to factories applying to the commissioner. False brands are prohibited.

Imitation butter. Any article not made wholly from milk or cream, and containing melted butter, fats, or oils not produced from milk, and which is in imitation of pure butter, is prohibited; but oleomargarine, free from color or any ingredient to cause it to look like butter, and made in such form and sold in such manner as will advise the consumer of its real character, is permitted; its sale as butter is prohibited; signs must be displayed where it is sold or used, and its original packages must be plainly marked "Oleomargarine" if the article contains suet or tallow, or "Butterine" if it contains lard; retail sales shall be made from a package so marked, and a label similarly printed and bearing the name of the manufacturer shall be delivered with each sale; shall not be used in any public institution.

Imitation cheese. Any article in semblance of pure cheese, containing melted butter or fats or oils not produced from milk, is prohibited.

Miscellaneous. The police commissioners of Detroit shall appoint an officer to act as milk inspector in that city; he shall inspect dairies, milk shops, etc., in Wayne County. Common councils or boards of trustees in cities and towns may appoint and fix the compensation of milk inspectors.

Pure food. An article of food is deemed adulterated when inferior substances have been mixed with it; when any valuable constituent has been abstracted; if it is in imitation of or sold as another article; if it is decomposed or from an unhealthy animal; if it is colored to conceal inferiority; if it contains any poisonous or injurious substances, etc.; with certain common exceptions. Such articles are prohibited.

MINNESOTA.

Dairy and food commissioner. The dairy and food commissioner is appointed by the governor; term of office, two years; salary, \$1,800 per annum. He may appoint a secretary at a salary of \$1,200 per year, and appoint and fix the compensation of such assistants, chemists, agents, and counsel as are necessary; biennial reports are made to the legislature; his authority extends to other foods. Fifteen thousand dollars is annually appropriated for his work.

Milk. Milk standard, 13 per cent solids, $3\frac{1}{2}$ per cent fat. Persons receiving milk shipped by train or cars must empty the vessels before the milk is sour, and immediately clean them. *Cream.*—Cream standard, 20 per cent fat. *Skimmed milk.*—Skimmed milk may be used for making skim cheese. Cans containing skimmed milk for sale must be plainly marked "Skimmed milk." *Adulterated milk.*—Unclean, unhealthy, adulterated, etc., milk includes that drawn from cows near the time of parturition, or fed on distillery waste, etc. (ensilage excepted); its sale or exchange or delivery to any factory, or its use for making cream or any food, is prohibited.

Butter. Butter is defined as the product usually known by that name, and manufactured exclusively from milk or cream, or both; it shall not be falsely branded.

Cheese. At least 45 per cent of the total solids of cheese must be fat. It shall not be falsely branded. A registered brand with a motto and the words "Minnesota State full cream cheese," for use on full cream cheese and their packages, is issued to factories upon application to the commissioner. *Skim cheese.*—Skim cheese is that below the standard for full cream cheese; it is permitted if the packages are plainly marked "Skim cheese;" a placard must be displayed where it is sold.

Imitation butter and cheese. Any article not made wholly from milk or cream, which is in imitation of and designed to take the place of pure butter or cheese, is prohibited; but such imitations of butter are permitted if colored bright pink. Butter made by any process by which casein and other ingredients of milk are made to replace pure fat shall be plainly marked "Patent butter," and a printed card stating its ingredients shall be given to each purchaser.

Miscellaneous. Milch cows shall not be kept in a crowded or unhealthy condition nor fed unwholesome food or any that produces impure milk.

Unless all the milk delivered is bought by a factory none of it shall be used by the operators for themselves without the consent of the owners; such factories shall keep a detailed account of their operations, open to the inspection of patrons.

Proprietors of factories, shippers of milk, and milk sellers shall make regular detailed reports to the commissioner. Milk dealers in towns of more than 1,000 inhabitants shall annually obtain from the commissioner, at the cost of \$1, a license giving certain information regarding the conduct of their business.

Any city council may provide for the inspection of milk, dairies, and herds supplying milk for its use.

MISSISSIPPI.

Milk. (No law.)

Butter. (No law.)

Cheese. (No law.)

Imitation butter. Packages of oleomargarine or similarly manufactured butters shall be plainly labeled with the correct name of their contents, and the product shall be sold by that name. A privilege tax of \$5 is imposed upon persons selling the articles named.

Imitation cheese. (No law.)

Miscellaneous. It is unlawful to milk the cow of another, or to confine her with intent to take her milk, without the consent of the owner.

MISSOURI.

Milk. (No law.)

Butter. (No law.)

Cheese. Cheese made from milk testing at least 3 per cent fat, or cream from the same, is deemed a full-cream cheese. *Skim cheese.*—Any cheese not made from pure milk testing at least 3 per cent fat, or cream from the same, shall be plainly branded "Skimmed-milk cheese," or "Not full-cream cheese," and its true name given.

Imitation butter. Imitation butter is defined as every article not produced wholly from pure milk or cream, made in semblance of and designed to be used as a substitute for pure butter; it shall not be sold as butter; shall not be colored to resemble butter unless it is to be sold outside the State; original packages shall be plainly stamped "Substitute for butter;" in hotels, etc., vessels in which it is served must be marked "Oleomargarine," or "Impure butter."

Imitation cheese. Any article not produced wholly from pure milk or cream and designed to take the place of cheese shall have its original packages stamped with its true name.

Miscellaneous. State board of agriculture is charged with enforcement of act relating to butter substitutes and cheese branding. Appropriation, \$5,000 for two years.

All cities and towns have power to license dairies, provide for inspection, etc.

MONTANA.

Milk. (No law.)

Butter. (No law.)

Cheese. (No law.)

Imitation butter and cheese. Any article in semblance of butter or cheese, and not made wholly from milk or cream, must be plainly labeled "Oleomargarine," or "Imitation cheese," and a printed label bearing the same word or words must be delivered to the purchaser with retail sales. Places where these articles are sold or used must display signs, and information as to their character be given if requested. Dealers must pay a license of 10 cents a pound on each pound sold.

Miscellaneous. Cows shall not be kept in unsanitary places, or fed food that produces unwholesome milk.

NEBRASKA.

Milk. *Adulterated milk.*—The sale of adulterated, skimmed, diseased, or tainted milk, or its delivery to a factory, is prohibited.

Butter and cheese. No poisonous or deleterious matter shall be used in the manufacture of butter or cheese.

Imitation butter and cheese. Imitation butter and cheese are defined as any article made in semblance of and designed to be used as a substitute for pure butter or cheese, and not produced wholly from pure milk or cream, salt, rennet, and harmless coloring matter. These articles, including any having melted butter added to them, shall not be colored to resemble butter or cheese; shall be plainly marked "Imitation butter," or "Imitation cheese;" verbal and printed information of the character of the articles, and address of the maker, shall be given at time of sale; signs shall be displayed in public eating places where used.

Miscellaneous. Use of cream by employees of a factory, without permission of patrons, is prohibited.

Pure food. Any article of food or drink is deemed adulterated if any inferior or injurious substance has been mixed with it, if any valuable constituent has been removed, if it is in imitation of or sold as another article, if it is diseased, decomposed, infected, if it is colored to conceal inferiority, etc. With certain exceptions, which shall be labeled, such articles are prohibited.

NEVADA.

Milk. *Skimmed milk.*—Skimmed milk may be sold as such. *Adulterated milk.*—The sale or exchange of adulterated milk, or milk from cows which are improperly cared for, or fed "swill" or other decomposed matter is a misdemeanor.

Butter. (No law.)

Cheese. (No law.)

Imitation butter. Any article in semblance of butter but not made exclusively of milk or cream, or containing melted butter, shall be in packages plainly marked "Oleomargarine."

Imitation cheese. (No law.)

Miscellaneous. Milk inspectors are appointed and their compensation fixed by board of county commissioners. They shall inspect milk sold by venders and prosecute violations. Care of cows regulated.

NEW HAMPSHIRE.

Milk. Milk standard, 13 per cent solids. It shall be sold by wine measure, and the capacity of vessels shall be marked upon them. *Skimmed milk.*—Milk from which any cream has been removed can be sold only from vessels plainly marked "Skimmed milk." *Adulterated milk.*—The sale of adulterated, unwholesome, diseased, etc., milk, and that from cows fed on brewery refuse, etc., is prohibited.

Butter and cheese. "Butter" and "cheese" are understood to mean the products usually known by those names, and which are manufactured exclusively from milk or cream, with salt and with or without coloring matter, and, if cheese, with rennet.

Imitation butter and cheese. Any article not made wholly from unadulterated milk or cream, which is in imitation of pure yellow butter or cheese, is prohibited, unless in packages plainly marked "Adulterated butter," "Oleomargarine," or "Imitation cheese." A label printed with the words on the original package shall be delivered with each retail sale. Oleomargarine, free from color or ingredient to cause it look like butter, and made in such form and sold in such manner as will advise the consumer of its real character, is permitted. Notice of the use of substitutes for butter in hotels, etc., shall be given to patrons.

Miscellaneous. The mayor and aldermen of cities and the selectmen of towns may appoint and fix the compensation of milk inspectors. In towns having inspectors, all milk dealers must register and obtain, at the cost of 50 cents per year, a license which gives full details as to the conduct of their business. Inspectors are given special powers for making inspections of milk, butter, etc., and names of persons convicted of selling adulterated milk are published.

NEW JERSEY.

Dairy Commissioner. Dairy commissioner is appointed by State board of health: term of office, three years; salary, \$2,000 per annum. He may appoint and fix the compensation of such assistants, chemists, agents, clerks, and counsel as are necessary. Expenses are limited to \$10,000 per year. An additional appropriation of \$1,000 is made for the enforcement of the pure-food law. Authority is extended to all foods and drugs.

Milk. Milk standard, 12 per cent solids. *Skimmed milk.*—Skimmed milk shall be sold only in or from cans plainly marked "Skimmed milk." In cities of the first class it is prohibited. *Adulterated milk.*—The sale of adulterated or unwholesome milk, or its delivery to a cheese factory, is prohibited. It is defined as any which has been adulterated by the addition of any substance, or any from cows poorly cared for or fed unwholesome foods, or that has been exposed to infection by diseased persons, etc.

Butter and cheese. The terms natural butter and natural cheese are taken to mean the products usually so called, made exclusively from milk or cream, with salt and rennet and with or without coloring matter or sage. Each butter or cheese package must be branded with its weight and the name of the manufacturer.

Imitation butter and cheese. Any article made wholly or partly out of any fat, oil, etc., not from pure milk or cream, artificially colored in imitation of pure yellow butter, is prohibited; but oleomargarine and imitation cheese are permitted, if free from artificial color and in original package encircled by a wide black band bearing the name of the maker and having the name of the contents plainly branded on them with a hot iron. Retail sales shall be accompanied by a printed card on which the name of the substance and the address of the maker are plainly printed, and the customer shall be orally informed of the character of the article at the time of sale.

Miscellaneous. It is unlawful for any person to use a milk can belonging to another and marked with the owner's name or initials without his consent. If they are so used and found, their contents may be emptied.

Cows shall be properly cared for and fed. Milch cows kept in towns shall be registered. State dairy commissioner shall be notified when any of them are supposed to be diseased.

Pure food. An article of food or drink is deemed to be adulterated if any inferior or injurious substance has been added to it, if any valuable constituent has been removed, if it is an imitation of or sold as another article, if it is diseased or decomposed, if it is colored to conceal inferiority, etc. With the exception of articles named by the board of health and ordinary articles of food, which shall be branded, such articles are prohibited.

NEW MEXICO.

Milk. (No law.)

Butter. (No law.)

Cheese. (No law.)

Imitation butter. (No law.)

Imitation cheese. (No law.)

Miscellaneous. City councils shall provide for the inspection of dairy products.

Pure food. Any article of food or drink shall not be knowingly sold if it is unhealthy, or if any valuable constituent has been removed from it, or if it contains ingredients not asked for, unless notice is given to the purchaser.

The use of an injurious coloring matter or any diseased or decomposed substance in the manufacture of food is prohibited.

NEW YORK.

Commissioner of agriculture. Commissioner of agriculture is appointed by the governor; term of office, three years; salary, \$4,000 per annum. He may appoint assistant commissioners, chemists, clerks, agents, and counsel necessary for the work of his office and fix their compensation; also may appoint five expert butter and cheese makers to inspect factories, give instruction, etc.

Milk. Milk standard, 12 per cent solids, 3 per cent fat. Pure milk is defined as sweet and unadulterated; pure cream is that taken from such milk. Milk shall not be kept in unclean vessels nor in unsanitary places. All cans, etc., containing milk to be sold in counties other than where produced, must be plainly branded with name of the county of production; vehicles from which it is sold must be similarly marked. Glass bottles are excepted from the provision, but they must bear the name of the vendor. *Skimmed milk.*—Skim milk may be delivered to skim-cheese factories, and except in New York and Kings counties, it may be sold as skimmed milk for use in the county where it is produced or an adjoining county. *Condensed milk.*—Condensed milk must be made from pure and wholesome milk, and its proportion of milk solids shall be in quantity the equivalent of 12 per cent of milk solids in crude milk, of which 25 per cent shall be fat. All packages of condensed milk shall be labeled with name of manufacturer, etc. *Adulterated milk.*—Adulterated milk is defined as any below the standard, or which has been altered, or any from cows poorly cared for or fed certain unwholesome foods. Its sale, exchange, delivery to a butter or cheese factory, or use for any food is prohibited. Pure skim milk is excepted as above.

Butter and cheese. Butter and cheese are defined as the products of the dairy usually known by those terms, manufactured exclusively from pure unadulterated milk or cream, with or without salt, rennet, coloring matter, or sage. False brands are prohibited. County trade-marks may be adopted by county dairymen's associations. A registered brand, with the words "New York State full cream cheese," for use on full milk cheese and their packages, will be furnished to factories applying to the commissioner of agriculture. *Skim cheese.*—Pure skim cheese may be made from clean, pure skim milk.

Imitation butter and cheese. The terms oleomargarine, butterine, imitation butter, or imitation cheese mean any article in the semblance of butter or cheese not the usual product of the dairy and not made exclusively from unadulterated milk, or having any oil, lard, melted butter, etc., as a component part. *Imitation butter.*—The manufacture of oleomargarine or any article in imitation of butter wholly or partly from fats or oils not produced from milk, or the sale or the use in hotels, etc., of such articles, is prohibited. No article intended as an imitation of butter and containing oils, fats, etc., not from milk, or melted butter in any condition, shall be colored yellow. *Imitation cheese.*—The manufacture or sale of any article in imitation of pure cheese, into which any animal fat, oil, or butter, etc., is introduced, is prohibited.

Miscellaneous. Milch cows shall not be kept in an unsanitary condition nor be fed distillery waste, spoiled feeds, or any food that injures milk; silage is permitted.

Unless factory operator buys all the milk delivered, he shall not use any of it or its products without consent of the owners, and he must keep an account of all factory operations for the inspection of his patrons.

NORTH CAROLINA.

Milk. (No law.)

Butter. Butter is defined as the product manufactured from fresh and pure milk and cream.

Cheese. (No law.)

Imitation butter. Oleomargarine and butterine are defined as articles manufactured in imitation of butter, and which are composed of any ingredient or ingredients in combination with butter. Original packages shall be labeled with chemical ingredients and their proportions.

Imitation cheese. (No law.)

Miscellaneous. District, county, and city attorneys shall prosecute offenders.

Pure food. An article of food or drink is deemed adulterated if any inferior or injurious substance has been added to it, if any valuable constituent has been removed, if it is an imitation of or sold as another article, if it is colored to conceal inferiority, if it is decomposed or unfit for food, etc.; with the exception of certain foods whose ingredients are known, such articles are prohibited.

NORTH DAKOTA.

Dairy commissioner. The State commissioner of agriculture and labor is ex officio State dairy commissioner.

Milk. (No law.)

Butter and cheese. Butter and cheese are defined as the products usually known by those names, and which are manufactured exclusively from milk or cream. Creameries and cheese factories shall brand each package of butter or cheese, giving quality of product, number of factory, etc. The brands are registered with the dairy commissioner.

Imitation butter. Wholesale and retail packages of any article in semblance of butter, not made wholly from pure milk or cream, and containing melted butter, oils, or fats, etc., shall be plainly marked "Oleomargarine," "Butterine," or "Patent butter." Butter made by any process by which casein of milk or other ingredients are made to take the place of pure fat shall be plainly marked "Patent butter." Sales of imitation butter shall be accompanied by a printed card giving the different ingredients.

Imitation cheese. Packages containing any substance designed to take the place of cheese, or in imitation of cheese, not produced wholly from pure milk, shall be stamped with the name of their contents. Sales of imitation cheese shall be accompanied by a printed card giving the different ingredients.

Miscellaneous. (No law.)

OHIO.

Dairy and food commissioner. State dairy and food commissioner is elected at the general elections; term of office, two years; salary, \$2,000 per year. He shall give bond for \$5,000. May appoint two assistant commissioners at salaries of \$1,000 per year; also appoint and fix the compensation of experts, chemists, agents, etc., as are necessary. Detailed annual report shall be made to the governor. Authority extends to all foods and drugs. Appropriation for 1898, \$42,600.

Milk. Milk standard, 12 per cent solids, 3 per cent fat; in May and June, 11 per cent solids. *Skimmed milk.*—Skimmed milk shall not be sold as pure milk, but it may be used for making skimmed cheese; cans containing it shall be plainly

marked "Skimmed milk." *Condensed milk.*—Condensed milk shall be made from pure fresh milk; the proportion of milk solids shall be equivalent to 12 per cent in crude milk, of which 25 per cent shall be fat; package containing same shall be plainly labeled with true name, brand, and name of manufacturer. *Adulterated milk.*—The sale of adulterated, skimmed, unclean, unhealthy, etc., milk, and that from sick cows, or its delivery to a factory, is prohibited.

Butter and cheese. Butter and cheese are defined as the products usually known by those names, and made wholly from pure milk or cream, with salt, and with or without harmless coloring matter, and, if cheese, with or without rennet and sage. *Butter.*—Standard for butter, 80 per cent fat. *Cheese.*—Registered brands with the words "Ohio State full cream cheese" are issued to factories for use on full milk cheese and their packages upon application to the dairy and food commissioner and payment of fee of \$1. *Skimmed cheese.*—Cheese as above defined, and containing less than 20 per cent fat, shall be plainly marked, and have its package marked, "Skimmed cheese;" packages sold at retail shall be accompanied by a label similarly marked; exposed contents of a package shall be labeled as above with a placard, and a sign "Skimmed cheese sold here" shall be posted where it is sold; delivery wagons shall display similar signs; notice shall be given of its use in public eating places.

Imitation butter and cheese. With the exceptions noted below, any article in imitation of natural butter or cheese, and containing animal or vegetable oils not produced from milk, or acids, is prohibited. Any other substance not made wholly from pure milk or cream, salt, and harmless coloring matter, and appearing to be butter or cheese, may be sold only under its true name. Each roll or package shall be plainly marked with its name and the names of its ingredients, and the same shall be on a label delivered with each sale, in connection with which the use of such words as "butter," "dairy," etc., are prohibited; information as to the substance shall be given at all retail sales; it shall not be packed so as to be concealed by a finer grade of butter; its use in State charitable and penal institutions is prohibited. Signs shall be used as described below. *Oleomargarine.*—Oleomargarine is defined as any substance not pure butter of not less than 80 per cent butter fat, and made for use as butter. It is permitted if free from coloring matter or other ingredient to cause it to look like butter, and made in such form and sold in such manner as will advise the consumer of its real character. *Filled cheese.*—Any article in imitation of cheese and not made wholly of milk or cream, etc., and containing any fats, oils, etc., not produced from milk or cream, shall be plainly marked, and have its package or the exposed contents of any package marked "Filled cheese;" each retail sale shall be accompanied by a label similarly marked; it shall not be sold as cheese. *Signs.*—The signs "Oleomargarine sold here" or "Filled cheese sold here" shall be displayed wherever these articles are sold, and signs and verbal information are required in public eating places where the articles are used; wagons delivering filled cheese shall display signs.

Miscellaneous. Milch cows shall not be kept in a cramped or unhealthy condition, nor fed unhealthy food, or food which produces unwholesome milk. Keeping a false account of milk delivered to a factory is prohibited. False brands on dairy products or their imitations are prohibited.

Pure food. Any article of food or drink is adulterated, if any inferior or poisonous substance has been mixed with it, if any valuable ingredient has been removed, if it is an imitation of or sold under the name of another article, if it is decomposed, infected, or from a diseased animal, if it is colored to conceal inferiority, etc.; such articles are prohibited. But certain common mixtures are permitted if packages are labeled with names of ingredients, etc.

OKLAHOMA.

Milk. *Adulterated milk.*—Milk from a cow not in proper condition of health, or any milk adulterated by water or a deleterious substance, or colored, shall not be sold or delivered.

Butter. (No law.)

Cheese. (No law.)

Imitation butter. (No law.)

Imitation cheese. (No law.)

Miscellaneous. (No law.)

Pure food. The adulteration of food or drink with fraudulent intent is a misdemeanor. Buyer shall be informed if provisions are diseased or unwholesome. Board of health shall destroy any impure article of food offered for sale.

OREGON.

Dairy and food commissioner. The dairy and food commissioner, who shall be well qualified in dairy matters, is elected by the legislative assembly; term of office, two years; salary, \$1,000 per year; shall enforce the law and give dairy instruction, and may appoint and fix compensation of one deputy in each county. Chemist of State Agricultural College shall make analyses. Annual appropriation for dairy commissioner, \$500.

Milk. Milk standard, 12 per cent volume of cream, 12 per cent solids, 3 per cent butter fat, specific gravity of 1.035 after the cream has been removed.

Adulterated milk.—Adulterated milk shall be plainly marked as such; it is defined as any which is below the standard, or has been altered so as to reduce its quality. Impure milk is defined as the product of cows fed unwholesome foods, or near the time of parturition; it is prohibited.

Butter. Butter standard, not more than 14 per cent water.

Cheese. (No law.)

Imitation butter and cheese. Adulterated butter or cheese is any which is below the standard; or has been altered so as to reduce its quality, or any article in imitation of or sold under the name of butter or cheese; it shall be plainly marked, and printed notice shall be given when it is used in public eating places. Salt and annatto or butter color in which annatto is the principal ingredient, are not adulterants of dairy products. Dealers in oleomargarine or any imitation dairy product shall keep a record of all sales.

Miscellaneous. Milch cows shall be allowed 800 cubic feet of air space each, in stables; rows facing each other shall not be closer than 6 feet. Stables shall be ventilated and kept in a healthful condition. Manufacturers of dairy products shall make detailed quarterly reports to the food commissioner. The boxes of any creamery or dairy shall not be used for selling the butter of another creamery or dairy.

PENNSYLVANIA.

Dairy and food commissioner. The dairy and food commissioner, who shall have practical experience in the manufacture of dairy products, is appointed by the governor; term of office, four years; salary, \$2,500 per year. He shall have a clerk, appointed by the governor; salary, \$1,500 per year. Authority extends to other foods. Commissioner shall make a detailed annual report.

Milk. Milk standard, in cities of the second and third class, 12½ per cent solids, 3 per cent fat, specific gravity at 60° F. between 1.029 and 1.033. In towns of over 1,000 population, vehicles from which milk is vended shall be marked

with names of vendors and locality of production; and in cities of the second class, dairies and milk depots shall be registered by the bureau of health. *Skimmed milk*.—Skimmed milk standard, in cities of the second and third class, 6 per cent cream by volume, $2\frac{1}{2}$ per cent fat by weight, specific gravity at 60° F. between 1.032 and 1.037; milk from which any cream has been taken shall not be sold unless in a vessel plainly marked "skimmed milk." *Adulterated milk*.—The sale of adulterated, impure, or unwholesome milk is a misdemeanor. The addition of water or ice to milk is an adulteration, and milk from animals fed on distillery waste, or any substance in a state of putrefaction, or from sick or diseased cows, is declared to be impure and unwholesome. The sale of milk for human consumption, which contains boracic acid salt, salicylic acid, or other drug, is prohibited.

Butter. (No law.)

Cheese. All cheese is divided into five grades, and each cheese and its package shall be plainly branded with the address of the maker, and the words "Full cream" if it contains not less than 32 per cent of butter fat; "Three-fourths cream" if it contains not less than 24 per cent butter fat; "One-half cream" if it contains not less than 16 per cent butter fat; "One-fourth cream" if it contains not less than 8 per cent butter fat; and "Skimmed cheese" if it contains less than 8 per cent butter fat. Fancy cheese weighing less than five pounds, and pot cheese, are excepted.

Imitation butter and cheese. The manufacture or sale of any imitation, or adulterated butter or cheese, or any oleaginous substance not produced from pure milk or cream and designed to take the place of butter or cheese, is prohibited. These articles shall not be used in any State, charitable, or penal institution.

Miscellaneous. Councils of cities and boroughs may provide for milk inspection.

Pure food. An article of food or drink is deemed adulterated if any inferior or injurious substance has been mixed with it, if any valuable constituent has been removed, if it is in imitation of or sold as another article, if it is diseased, decomposed, infected, if it is colored to conceal inferiority, etc. With certain exceptions which shall be labeled such articles are prohibited.

RHODE ISLAND.

Milk. Milk standard, 12 per cent solids, $2\frac{1}{2}$ per cent fat; shall be sold by wine measure; vessels to be sealed by the sealer of weights and measures. *Skimmed milk*.—Skimmed milk is that which has been skimmed, or is below the standard; it shall be sold only from cans plainly marked, "Skimmed milk." *Adulterated milk*.—The sale or exchange of adulterated or diseased milk, or that from diseased cattle, or cows fed on distillery refuse, etc., is prohibited.

Butter. All butter tubs shall be marked with their weights, and maker's initials.

Cheese. (No law.)

Imitation butter. Any article not made wholly from milk or cream, but containing any melted butter or animal oil or fat not the product of milk, shall be plainly marked "Oleomargarine," and a label similarly printed shall be delivered with all retail sales.

Imitation cheese. (No law.)

Miscellaneous. The mayor and aldermen of any city and the council of any town may elect and fix the compensation of milk inspectors. In Providence this is compulsory. Inspectors may appoint collectors of samples. All persons engaged in selling milk must register with the inspector and have their names on their wagons, etc. The authority of inspectors extends to other foods. Names of persons convicted are published.

SOUTH CAROLINA.

Milk. Milk standard, 3 per cent fat, $8\frac{1}{2}$ per cent other solids. *Skimmed milk.*—Skimmed milk is that below the standard; it and buttermilk may be sold under their own name. *Adulterated milk.*—The sale of unclean, diseased, adulterated, etc., milk, or its delivery for domestic use, or to be converted into any human food, is prohibited.

Butter. (No law.)

Cheese. (No law.)

Imitation butter and cheese. Imitation butter and cheese are defined as every article not produced from pure milk or cream, with or without salt, rennet, and harmless coloring matter, which is in semblance of and designed to be used as a substitute for butter or cheese; they shall not be colored to resemble butter or cheese; original packages shall be marked "Substitute for butter," or "Substitute for cheese;" shall not be sold as genuine butter or cheese, nor used in hotels, etc., unless signs are displayed.

Miscellaneous. Statement of the chemist of the State College shall be accepted as evidence of analysis of imitation butter and cheese.

SOUTH DAKOTA.

Milk. *Adulterated milk.*—The sale of unwholesome, diseased, or adulterated milk as the pure article is prohibited.

Butter and cheese. Butter and cheese are defined as the products usually known by those names, and which are made wholly from milk or cream or both, with salt and rennet, and with or without coloring matter.

Imitation butter. Any article not made wholly from pure milk or cream, and in imitation of pure butter, is prohibited; but oleomargarine, colored pink, and made in such form and sold in such manner as will advise the consumer of its real character, is permitted; notice of its use in public eating places must be given.

Imitation cheese. (No law.)

Miscellaneous. Health officers, sheriffs, etc., shall institute complaints, etc.

Pure food. Any article of food or drink which is diseased or unwholesome, or fraudulently adulterated or colored, for gain, is prohibited, unless plainly labeled, etc.

TENNESSEE.

Milk. (No law.)

Butter. (No law.)

Cheese. (No law.)

Imitation butter. Any article which is in imitation of yellow butter and not made exclusively from pure milk or cream is prohibited; but oleomargarine, free from color or other ingredient to cause it to look like butter, and made in such form and sold in such manner as will advise the consumer of its true character, and other imitations if uncolored and labeled with their correct names, are permitted; wholesale packages shall be plainly labeled, and a label shall accompany retail sales.

Imitation cheese. Imitation cheese may be manufactured under its true name; each package and its contents shall be stamped with the correct name, and a label, similarly printed, shall be delivered with retail sales.

Miscellaneous. (No law.)

Pure food. Any article of food or drink is adulterated if inferior substances have been added to it; if any valuable constituent has been abstracted; if it is an imitation of or sold as another article; if it contains any poisonous substance; if it is decomposed or diseased or from an unhealthy animal, etc. With certain common exceptions, such articles and all misbranded articles are prohibited.

TEXAS.

(No dairy laws.)

UTAH.

Milk. *Adulterated milk.*—The sale or exchange of unclean, impure, etc., milk, or its use for making any kind of food, is prohibited.

Butter. (No law.)

Cheese. (No law.)

Imitation butter and cheese. Any article in semblance of butter or cheese, and not made wholly from milk or cream, shall be plainly marked "Oleomargarine butter," or "Imitation cheese," and retail sales shall be made from packages so marked. Such articles shall not be colored to resemble butter or cheese.

Miscellaneous. (No law.)

VERMONT.

Milk. Milk standards, 12½ per cent solids, 9½ per cent solids not fat; in May and June, 12 per cent total solids. Standard measure is wine measure. *Adulterated milk.*—The sale of adulterated or skim milk, or milk below the standard, or its delivery to a factory, or the delivery of tainted milk to a factory, is prohibited.

Butter and cheese. Butter or cheese shall not be marked "Creamery," unless made in a creamery; marking "Private creamery" is permitted if name of maker is also given. *Butter.*—Butter is defined as the product usually known by that name, and made wholly from milk or cream, with or without salt or coloring matter.

Imitation butter or cheese. The manufacture of any article in imitation of butter or cheese which contains any animal fat, or animal or vegetable oils or acids not produced from pure milk or cream, is prohibited. *Imitation butter.*—Imitation butter for use in public eating places, or for sale, shall be colored pink.

Miscellaneous. Payment for milk at factories is to be based on milk testing 4 per cent fat. Result of analysis by the State Agricultural Experiment Station shall be deemed competent evidence in prosecutions. Operators of factories shall not use any cream from the milk delivered to them, except with consent of owners.

VIRGINIA.

Milk. *Adulterated milk.*—The sale of adulterated, skimmed, tainted, etc., milk, or its delivery to any creamery or cheese factory, is prohibited.

Butter. Butter inspectors shall brand lots of butter offered for inspection according to quality.

Cheese. *Skimmed cheese.*—Skimmed cheese may be made from pure skimmed milk.

Imitation butter. The manufacture or sale of any article made wholly or partly from any fat or oil not produced from unadulterated milk or cream, and which is in imitation of pure yellow butter, is prohibited; but oleo-

margarine, butterine, or kindred compound, made in such form and sold in such manner as will advise the consumer of its real character, and free from color or other ingredient to cause it to look like butter, is permitted. Signs, with the words "Imitation butter used here," shall be displayed in eating places, bakeries, etc., where the articles above named are used.

Imitation cheese. The manufacture or sale or use in public eating places, of any article in imitation of and designed to take the place of pure cheese, and not made wholly from milk or cream, is prohibited.

Miscellaneous. Factory employees shall not use cream without the consent of its owners.

WASHINGTON.

Dairy commissioner. Dairy commissioner is appointed by the governor; term of office, four years; salary, \$1,200; must give bond for \$3,000. He may appoint deputies at \$3 per day when necessary; the services of chemists of State institutions are available; other chemists may be employed when necessary. Appropriation, \$3,000 per year. A State board of dairy commissioners, ex officio, is constituted of the secretary of state, president of the agricultural college, and dairy commissioner. Members receive no salary, but are allowed traveling expenses. They report to the governor biennially.

Milk. Milk standard, 3 per cent fat, 8 per cent solids not fat. *Adulterated milk.*—Adulterated, skimmed, diseased, impure, etc., milk is defined as any below the standard, or which has been altered in any way, or is from cows diseased, poorly cared for, or fed unwholesome foods, or has been exposed to infection by disease germs, or has borax or salicylic acid added to it to prevent souring, etc. It shall not be sold as pure milk.

Butter. (No law.)

Cheese. All cheese made by Cheddar process shall be branded with the name and location of factory, and the words "Washington full cream," if made wholly from pure milk and containing at least 30 per cent fat; "Half skimmed," if containing at least 15 per cent butter fat and made from milk from which not more than one-half the cream has been extracted; or "Skimmed," if made from pure skimmed milk. All cheese shipped from other States must be branded to indicate its quality, as above.

Imitation butter. No article which is in imitation of pure yellow butter and is not made wholly from pure milk or cream, with or without harmless coloring matter, shall be manufactured, sold, or used in any public eating house or eleemosynary or penal institution, etc., but oleomargarine, free from color or other ingredient to make it look like butter, and made in such form and sold in such manner as will advise the consumer of its real character, is permitted.

Imitation cheese. Any cheese not made from pure milk or cream or skimmed milk, with salt, rennet, and harmless coloring matter, is prohibited.

Miscellaneous. A record of the operations of every butter and cheese factory and private dairy (of 20 cows or more) where butter or cheese is made shall be kept and always open to the inspection of the dairy commissioner or any patron.

WEST VIRGINIA.

Milk. *Skimmed milk.*—Skimmed milk may be used in the manufacture of cheese.

Butter and cheese. Salt, rennet, and harmless coloring matter are permitted in the manufacture of butter and cheese.

Imitation butter and cheese. Any substance in semblance of butter or cheese, and not made wholly from pure milk or cream, and packages containing such substances, shall be plainly marked; printed statements explaining the character of the substance must be given to consumers. *Oleomargarine*.—*Oleomargarine* and artificial and adulterated butter shall be colored pink.

Miscellaneous. (No law.)

Pure food. The adulteration of any article of food or drink is a misdemeanor.

WISCONSIN.

Dairy and food commissioner. Dairy and food commissioner is appointed by the governor; term of office, two years; salary, \$2,500 per annum. He may appoint an assistant commissioner at a salary of \$1,000, a chemist at \$1,800, and a clerk at \$900 per annum; also an inspecting agent at \$3 per day. Authority extends to all foods and medical drugs. Laboratory for all analytical work is provided. Commissioner shall make biennial reports, issue brands to cheese factories, enforce measures for cleanliness of dairies, factories, etc.

Milk. Milk standard, 3 per cent fat and pure. Milk for city trade must be produced from healthy cows fed wholesome food. Barns, stables, etc., must be clean. *Adulterated milk*.—The sale of adulterated, diseased, etc., milk, or its delivery to a factory, is prohibited. Boracic and salicylic acids and injurious antiseptics are prohibited. Standard tests may be made for proving adulteration.

Butter. Use of boracic and salicylic acids and injurious antiseptics in the manufacture of butter are prohibited.

Cheese. Unlawful to use false brands on cheese. Brand, with the words "Wisconsin full-cream cheese," is issued to factories upon application to dairy commissioner. *Skimmed cheese*.—Skimmed cheese must be 10 inches in diameter and 9 inches high, and stamped "Wisconsin skimmed cheese."

Imitation butter. Any article made partly or wholly out of any fat or oil, etc., not from pure milk or cream, and in imitation of yellow butter, is prohibited; but *oleomargarine*, free from color or other ingredient to make it look like butter, and made in such form and sold in such manner as will advise the consumer of its real character, is permitted. It shall not be sold as butter. All packages exposed for sale must be plainly marked "*Oleomargarine*;" signs must be displayed in selling places and on wagons. Hotels, etc., using it must notify guests. Use not permitted in charitable or penal institutions.

Imitation cheese. Manufacture or sale of cheese made from skimmed milk with the addition of fat foreign to milk is prohibited.

Miscellaneous. Wholesome food shall be fed to cows producing milk for retail sale. Account of daily operations must be posted in butter and cheese factories.

Pure food. Any article of food or drink shall be deemed adulterated if any injurious or inferior substance has been added to it; if any valuable ingredient has been removed; if it is an imitation of or sold as another article; if it is diseased, infected, decomposed; if it is colored to conceal inferiority, etc. With the exception of certain ordinary foods, which shall be plainly labeled, such articles are prohibited.

WYOMING.

(No dairy laws.)

CANADA.

(For full text of law, see p. 703).

DAIRY LAWS IN FULL.

UNITED STATES.

FORTY-NINTH CONGRESS, Session I, 1886, Chapter 840.

AN ACT defining butter, also imposing a tax upon and regulating the manufacture, sale, importation, and exportation of oleomargarine. (Approved August 2, 1886.)

Butter defined. SECTION 1. That for the purpose of this act the word "butter" shall be understood to mean the food product usually known as butter, and which is made exclusively from milk or cream, or both, with or without common salt, and with or without additional coloring matter.

Oleomargarine defined. SEC. 2. That for the purposes of this act certain manufactured substances, certain extracts, and certain mixtures and compounds, including such mixtures and compounds with butter, shall be known and designated as "oleomargarine," namely: All substances heretofore known as oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine, and neutral; all mixtures and compounds of oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine, and neutral; all lard extracts and tallow extracts; and all mixtures and compounds of tallow, beef fat, suet, lard, lard oil, vegetable oil, annatto, and other coloring matter, intestinal fat, and offal fat made in imitation or semblance of butter, or, when so made, calculated or intended to be sold as butter or for butter.

Special taxes. SEC. 3. That special taxes are imposed as follows:

Manufacturers. Manufacturers of oleomargarine shall pay six hundred dollars. Every person who manufactures oleomargarine for sale shall be deemed a manufacturer of oleomargarine.

Wholesale dealers. Wholesale dealers in oleomargarine shall pay four hundred and eighty dollars. Every person who sells or offers for sale oleomargarine in the original manufacturer's packages shall be deemed a wholesale dealer in oleomargarine. But any manufacturer of oleomargarine who has given the required bond and paid the required special tax, and who sells only oleomargarine of his own production, at the place of manufacture, in the original packages to which the tax-paid stamps are affixed, shall not be required to pay the special tax of a wholesale dealer in oleomargarine on account of such sales.

Retail dealers. Retail dealers in oleomargarine shall pay forty-eight dollars. Every person who sells oleomargarine in less quantities than ten pounds at one time shall be regarded as a retail dealer in oleomargarine. And sections thirty-two hundred and thirty-two, thirty-two hundred and thirty-three, thirty-two hundred and thirty-four, thirty-two hundred and thirty-five, thirty-two hundred and thirty-six, thirty-two hundred and thirty-seven, thirty-two hundred and thirty-eight, thirty-two hundred and thirty-nine, thirty-two hundred and forty, thirty-two hundred and forty-one, and thirty-two hundred and forty-three of the Revised Statutes of the United States are, so far as applicable, made to extend to and include and apply to the special taxes imposed by this section, and to the persons upon whom they are imposed:¹ *Provided*, That in case any manufacturer of oleomargarine commences business subsequent to the thirtieth day of June in any year, the special tax shall be reckoned from the first day of July in that year, and shall be five hundred dollars.

Penalties. SEC. 4. That every person who carries on the business of a manufacturer of oleomargarine without having paid the special tax therefor, as required by law, shall, besides being liable to the payment of the tax, be fined not less than one thousand and not more than five thousand dollars; and every person who carries on the business of a wholesale dealer in oleomargarine without having paid the special tax therefor, as required by law, shall, besides being liable to the payment of the tax, be fined not less than five hundred nor more than two thousand dollars; and every person who carries on the business of a retail dealer in oleomargarine without having paid the special tax therefor, as required by law, shall, besides being liable to the payment of the tax, be fined not less than fifty nor more than five hundred dollars for each and every offense.

¹ Repealed; see section 53, act of October 1, 1890, below.

Manufacturers shall file notices, bonds, etc. SEC. 5. That every manufacturer of oleomargarine shall file with the collector of internal revenue of the district in which his manufactory is located such notices, inventories, and bonds, shall keep such books and render such returns of material and products, shall put up such signs and affix such number to his factory, and conduct his business under such surveillance of officers and agents as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may, by regulation, require. But the bond required of such manufacturer shall be with sureties satisfactory to the collector of internal revenue, and in a penal sum of not less than five thousand dollars; and the sum of said bond may be increased from time to time and additional sureties required at the discretion of the collector or under instructions of the Commissioner of Internal Revenue.

Packages to be branded. SEC. 6. That all oleomargarine shall be packed by the manufacturer thereof in firkins, tubs, or other wooden packages not before used for that purpose, each containing not less than ten pounds, and marked, stamped, and branded as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall prescribe; and all sales made by manufacturers of oleomargarine and wholesale dealers in oleomargarine shall be in original stamped packages. Retail dealers in oleomargarine must sell only from original stamped packages, in quantities not exceeding ten pounds, and shall pack the oleomargarine sold by them in suitable wooden or paper packages, which shall be marked and branded as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall prescribe. Every person who knowingly sells or offers for sale, or delivers or offers to deliver, any oleomargarine in any other form than in new wooden or paper packages as above described, or who packs in any package any oleomargarine in any manner contrary to law, or who falsely brands any package or affixes a stamp on any package denoting a less amount of tax than that required by law, shall be fined for each offense not more than one thousand dollars and be imprisoned not more than two years.

Manufacturers' sales in original packages. of the Secretary of the Treasury, shall prescribe; and all sales made by manufacturers of oleomargarine and wholesale dealers in oleomargarine shall be in original stamped packages. Retail dealers in oleomargarine must sell only from original stamped packages, in quantities not exceeding ten pounds, and shall pack the oleomargarine sold by them in suitable wooden or paper packages, which shall be marked and branded as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall prescribe. Every person who knowingly sells or offers for sale, or delivers or offers to deliver, any oleomargarine in any other form than in new wooden or paper packages as above described, or who packs in any package any oleomargarine in any manner contrary to law, or who falsely brands any package or affixes a stamp on any package denoting a less amount of tax than that required by law, shall be fined for each offense not more than one thousand dollars and be imprisoned not more than two years.

Label on each package. SEC. 7. That every manufacturer of oleomargarine shall securely affix, by pasting, on each package containing oleomargarine manufactured by him, a label on which shall be printed, besides the number of the manufactory and the district and State in which it is situated, these words: "Notice—The manufacturer of the oleomargarine herein contained has complied with all the requirements of law. Every person is cautioned not to use either this package again or the stamp thereon again, nor to remove the contents of this package without destroying said stamp, under the penalty provided by law in such cases." Every manufacturer of oleomargarine who neglects to affix such label to any package containing oleomargarine made by him, or sold or offered for sale by or for him, and every person who removes any such label so affixed from any such package, shall be fined fifty dollars for each package in respect to which such offense is committed.

Tax of two cents per pound. SEC. 8. That upon oleomargarine which shall be manufactured and sold, or removed for consumption or use, there shall be assessed and collected a tax of two cents per pound, to be paid by the manufacturer thereof; and any fractional part of a pound in a package shall be taxed as a pound. The tax levied by this section shall be represented by coupon stamps; and the provisions of existing laws governing the engraving, issue, sale, accountability, effacement, and destruction of stamps relating to tobacco and snuff, as far as applicable, are hereby made to apply to stamps provided for by this section.

Assessment for unpaid taxes. SEC. 9. That whenever any manufacturer of oleomargarine sells, or removes for sale or consumption, any oleomargarine upon which the tax is required to be paid by stamps, without the use of the proper stamps, it shall be the duty of the Commissioner of Internal Revenue, within a period of not more than two years after such sale or removal, upon satisfactory proof, to estimate the amount of tax which has been omitted to be paid, and to make an assessment therefor and certify the same to the collector. The tax so assessed shall be in addition to the penalties imposed by law for such sale or removal.

Additional duty on imported oleomargarine. SEC. 10. That all oleomargarine imported from foreign countries shall, in addition to any import duty imposed on the same, pay an internal-revenue tax of fifteen cents

per pound, such tax to be represented by coupon stamps as in the case of oleomargarine manufactured in the United States. The stamps shall be affixed and canceled by the owner or importer of the oleomargarine while it is in the custody of the proper custom-house officers; and the oleomargarine shall not pass out of the custody of said officers until the stamps have been so affixed and canceled, but shall be put up in wooden packages, each containing not less than ten pounds, as prescribed in this act for oleomargarine manufactured in the United States, before the stamps are affixed; and the owner or importer of such oleomargarine shall be liable to all the penal provisions of this act prescribed for manufacturers of oleomargarine manufactured in the United States. Whenever it is necessary to take any oleomargarine so imported to any place other than the public stores of the United States for the purpose of affixing and canceling such stamps, the

Duty of customs officer. collector of customs of the port where such oleomargarine is entered shall designate a bonded warehouse to which it shall be taken, under the control of such customs officer as such collector may direct; and every officer of customs who permits any such oleomargarine to pass out of his custody or control without compliance by the owner or importer thereof with the provisions of this section relating thereto, shall be guilty of a misdemeanor, and shall be fined not less than one thousand dollars nor more than five thousand dollars, and imprisoned not less than six months nor more than three years. Every person who sells or offers for sale any imported oleomargarine, or oleomargarine purporting or claimed to have been imported, not put up in packages and stamped as provided by this act, shall be fined not less than five hundred dollars nor more than five thousand dollars, and be imprisoned not less than six months nor more than two years.

Unbranded oleomargarine; penalty. SEC. 11. That every person who knowingly purchases or receives for sale any oleomargarine which has not been branded or stamped according to law shall be liable to a penalty of fifty dollars for each such offense.

Possession of oleomargarine for which tax has not been paid. SEC. 12. That every person who knowingly purchases or receives for sale any oleomargarine from any manufacturer who has not paid the special tax shall be liable for each offense to a penalty of one hundred dollars, and to a forfeiture of all articles so purchased or received, or of the full value thereof.

Destruction of stamps. SEC. 13. That whenever any stamped package containing oleomargarine is emptied, it shall be the duty of the person in whose hands the same is to destroy utterly the stamps thereon; and any person who willfully neglects or refuses so to do shall, for each such offense, be fined not exceeding fifty dollars, and imprisoned not less than ten days nor more than six months. And any person who fraudulently gives away or accepts from another, or who sells, buys, or uses for packing oleomargarine, any such stamped package shall, for each such offense, be fined not exceeding one hundred dollars, and be imprisoned not more than one year. Any revenue officer may destroy any emptied oleomargarine package upon which the tax-paid stamp is found.

Chemists and microscopists. SEC. 14. That there shall be in the office of the Commissioner of Internal Revenue an analytical chemist and a microscopist, who shall each be appointed by the Secretary of the Treasury, and shall each receive a salary of two thousand five hundred dollars per annum; and the Commissioner of Internal Revenue may, whenever in his judgment the necessities of the service so require, employ chemists and microscopists, to be paid such compensation as he may deem proper, not exceeding in the aggregate any appropriation made for that purpose. And such Commissioner is

Rights of Commissioner. authorized to decide what substances, extracts, mixtures, or compounds which may be submitted for his inspection in contested cases are to be taxed under this act; and his decision in matters of taxation under this act shall be final. The Commissioner may also decide whether any substance made in imitation or semblance of butter, and intended for human consumption, contains ingredients deleterious to the public health; but in case of doubt or contest his decisions in this class of cases may be appealed from to a board

Board of appeal. hereby constituted for the purpose, and composed of the Surgeon-General of the Army, the Surgeon-General of the Navy, and the Commissioner¹ of Agriculture; and the decisions of this board shall be final in the premises.

Oleomargarine, without stamps or impure. SEC. 15. That all packages of oleomargarine subject to tax under this act that shall be found without stamps or marks as herein provided, and all oleomargarine intended for

¹ Now Secretary.

Removing stamps, etc.; penalty. Any person who shall willfully remove or deface the stamps, marks, or brands on package containing oleomargarine taxed as provided herein shall be guilty of a misdemeanor, and shall be punished by a fine of not less than one hundred dollars nor more than two thousand dollars, and by imprisonment for not less than thirty days nor more than six months.

PENALTY, FORFEIT OF FACTORY, ETC. SEC. 17. That whenever any person engaged in carrying on the business of manufacturing oleomargarine defrauds, or attempts to defraud, the United States of the tax on the oleomargarine produced by him, or any part thereof, he shall forfeit the factory and manufacturing apparatus used by him, and all oleomargarine and all raw material for the production of oleomargarine found in the factory and on the factory premises, and shall be fined not less than five hundred dollars nor more than five thousand dollars, and be imprisoned not less than six months nor more than three years.

Recovery of fines. SEC. 19. That all fines, penalties, and forfeitures imposed by this act may be recovered in any court of competent jurisdiction.

In effect. SEC. 21. That this act shall go into effect on the nineteenth day after its passage; and all wooden packages containing ten or more pounds of oleomargarine found on the premises of any dealer on or after the nineteenth day succeeding the date of the passage of this act shall be deemed to be taxable under section eight of this act, and shall be taxed, and shall have affixed thereto the stamps, marks, and brands required by this act or by regulations made pursuant to this act; and for the purposes of securing the affixing of the stamps, marks, and brands required by this act, the oleomargarine shall be regarded as having been manufactured and sold, or removed from the manufactory for consumption or use, on or after the day this act takes effect; and such stock on hand at the time of the taking effect of this act may be stamped, marked, and branded under special regulations of the Commissioner of Internal Revenue, approved by the Secretary of the Treasury; and the Commissioner of Internal Revenue may authorize the holder of such packages to mark and brand the same and to affix thereto the proper tax-paid stamps.

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Taxes due July 1. SEC. 58. That all special taxes shall become due on the first day of July, eighteen hundred and ninety-one, and on the first day of July in each year thereafter, or on commencing any trade or business on which such tax is imposed. In the former case the tax shall be reckoned for one year; and in the latter case it shall be reckoned proportionately, from the first day of the month in which the liability to a special tax commenced to the first day of July following. Special tax stamps may be issued for the months of May and June, eighteen hundred and ninety-one, upon payment of the amount of tax reckoned proportionately under the laws now in force, and such stamps which have been or may be issued for the period ending April thirtieth, eighteen hundred and ninety-one, may, upon payment of one-sixth of the amount required to be paid for such stamps for one year, be extended until July first, eighteen hundred and ninety-one, under such regulations as may be prescribed by the Commissioner of Internal Revenue. And it shall be the duty of special tax payers to render their returns to the deputy collector at such times within the calendar month in which the special tax liability commenced as shall enable him to receive such returns, duly signed and verified, not later than the last day of the month, except in cases of sickness or absence, as provided for in section three thousand one hundred and seventy-six of the Revised Statutes.

FIFTY-FOURTH CONGRESS, Session I, 1896, Chapter 337.

AN ACT defining cheese, and also imposing a tax upon and regulating the manufacture, sale, importation, and exportation of "filled cheese." (Approved, June 6, 1896.)

Cheese defined. SECTION 1. That for the purposes of this act the word "cheese" shall be understood to mean the food product known as cheese, and which is made from milk or cream and without the addition of butter or any animal, vegetable, or other oils or fats foreign to such milk or cream, with or without additional coloring matter.

Filled cheese defined. SEC. 2. That for the purposes of this act certain substances and compounds shall be known and designated as "filled cheese," namely: All substances made of milk or skimmed milk with the admixture of butter, animal oils, or fats, vegetable or any other oils, or compounds foreign to such milk, and made in imitation or semblance of cheese.

Special taxes. SEC. 3. That special taxes are imposed as follows:

Manufacturers. Manufacturers of filled cheese shall pay four hundred dollars for each and every factory per annum. Every person, firm, or corporation who manufactures filled cheese for sale shall be deemed a manufacturer of filled cheese.

Wholesale dealers. Wholesale dealers in filled cheese shall pay two hundred and fifty dollars per annum. Every person, firm, or corporation who sells or offers for sale filled cheese in the original manufacturer's packages for resale, or to retail dealers as hereinafter defined, shall be deemed a wholesale dealer in filled cheese. But any manufacturer of filled cheese who has given the required bond and paid the required special tax, and who sells only filled cheese of his own production, at the place of manufacture, in the original packages, to which the tax-paid stamps are affixed, shall not be required to pay the special tax of a wholesale dealer in filled cheese on account of such sales.

Retail dealers. Retail dealers in filled cheese shall pay twelve dollars per annum. Every person who sells filled cheese at retail, not for resale, and for actual consumption, shall be regarded as a retail dealer in filled cheese, and sections thirty-two hundred and thirty-two, thirty-two hundred and thirty-three, thirty-two hundred and thirty-four, thirty-two hundred and thirty-five, thirty-two hundred and thirty-six, thirty-two hundred and thirty-seven, thirty-two hundred and thirty-eight, thirty-two hundred and thirty-nine, thirty-two hundred and forty, thirty-two hundred and forty-one, thirty-two hundred and forty-three of the Revised Statutes of the United States are, so far as applicable, made to extend to and include and apply to the special taxes imposed by this section and to the persons, firms, or corporations upon whom they are imposed: *Provided*, That all special taxes under this act shall become due on the first day of July in every year, or on commencing any manufacture, trade, or business on which said tax is imposed. In the latter case the tax shall be reckoned proportionately from the first day of the month in which the liability to the special tax commences to the first day of July following.

Penalties. SEC. 4. That every person, firm, or corporation who carries on the business of a manufacturer of filled cheese without having paid the special tax therefor as required by law, shall, besides being liable to the payment of

the tax, be fined not less than four hundred dollars and not more than three thousand dollars; and every person, firm, or corporation who carries on the business of a wholesale dealer in filled cheese without having paid the special tax therefor, as required by law, shall, besides being liable to the payment of the tax, be fined not less than two hundred and fifty dollars nor more than one thousand dollars; and every person, firm, or corporation who carries on the business of a retail dealer in filled cheese without having paid the special tax therefor, as required by law, shall, besides being liable for the payment of the tax, be fined not less than forty nor more than five hundred dollars for each and every offense.

Manufacturers shall file notices, bonds, etc. SEC. 5. That every manufacturer of filled cheese shall file with the collector of internal revenue of the district in which his manufactory is located such notices, inventories, and bonds, shall keep such books and render such returns of materials and products, shall put up such signs and affix such number to his factory, and conduct his business under such surveillance of officers and agents as the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, may by regulation require. But the bond required of such manufacturer shall be with sureties satisfactory to the collector of internal revenue, and in a penal sum of not less than five thousand dollars; and the amount of said bond may be increased from time to time, and additional sureties required at the discretion of the collector or under instructions of the Commissioner of Internal Revenue. Any manufacturer of filled cheese who fails to comply with the provisions of this section or with the regulations herein authorized shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than five hundred nor more than one thousand dollars.

Packages to be branded. SEC. 6. That filled cheese shall be packed by the manufacturers in wooden packages only, not before used for that purpose, and marked, stamped, and branded with the words "Filled cheese" in black-faced letters not less than two inches in length, in a circle in the center of the top and bottom of the cheese; and in black-faced letters of not less than two inches in length in line from the top to the bottom of the cheese, on the side in four places equidistant from each other: and the package containing such cheese shall be marked in the same manner, and in the same number of places, and in the same description of letters as above provided for the marking of the cheese; and

Manufacturers' sales in original packages. all sales or consignments made by manufacturers of filled cheese to wholesale dealers in filled cheese or to exporters of filled cheese shall be in original stamped packages.

Retail sales from original packages. Retail dealers in filled cheese shall sell only from original stamped packages, and shall pack the filled cheese, when sold in suitable wooden or paper packages, which shall be marked and branded in accordance with rules and regulations to be prescribed by the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury.

Penalty. Every person who knowingly sells or offers to sell, or delivers or offers to deliver, filled cheese in any other form than in new wooden or paper packages, marked and branded as hereinbefore provided and as above described, or who packs in any package or packages filled cheese in any manner contrary to law, or who falsely brands any package or affixes a stamp on any package denoting a less amount of tax than that required by law, shall, upon conviction thereof, be fined for each and every offense not less than fifty dollars and not more than five hundred dollars, or be imprisoned not less than thirty days nor more than one year.

Signs where sales are made; penalty. SEC. 7. That all retail and wholesale dealers in filled cheese shall display in a conspicuous place in his or their sales room a sign bearing the words "Filled cheese sold here" in black-faced letters not less than six inches in length, upon a white ground, with the name and number of the revenue district in which his or their business is conducted; and any wholesale or retail dealer in filled cheese who fails or neglects to comply with the provisions of this section shall be deemed guilty of a misdemeanor, and shall on conviction thereof be fined for each and every offense not less than fifty dollars and not more than two hundred dollars.

Label on each package; penalty. SEC. 8. That every manufacturer of filled cheese shall securely affix, by pasting on each package containing filled cheese manufactured by him, a label on which shall be printed, besides the number of the manufactory and the district and State in which it is situated, these words: "Notice.—The manufacturer of the filled cheese herein contained has

complied with all the requirements of the law. Every person is cautioned not to use either this package again or the stamp thereon again, nor to remove the contents of this package without destroying said stamp, under the penalty provided by law in such cases." Every manufacturer of filled cheese who neglects to affix such label to any package containing filled cheese made by him or sold or offered for sale by or for him, and every person who removes any such label so affixed from any such package, shall be fined fifty dollars for each package in respect to which such offense is committed.

Tax of one cent per pound; coupon stamps. SEC. 9. That upon all filled cheese which shall be manufactured there shall be assessed and collected a tax of one cent per pound, to be paid by the manufacturer thereof; and any fractional part of a pound in a package shall be taxed as a pound. The tax levied by this section shall be represented by coupon stamps; and the provisions of existing laws governing the engraving, issue, sale, accountability, effacement, and destruction of stamps relating to tobacco and snuff, as far as applicable, are hereby made to apply to stamps provided for by this section.

Assessment for unpaid taxes. SEC. 10. That whenever any manufacturer of filled cheese sells or removes for sale or consumption any filled cheese upon which the tax is required to be paid by stamps, without paying such tax, it shall be the duty of the Commissioner of Internal Revenue, within a period of not more than two years after such sale or removal, upon satisfactory proof, to estimate the amount of tax which has been omitted to be paid and to make an assessment therefor and certify the same to the collector. The tax so assessed shall be in addition to the penalties imposed by law for such sale or removal.

Additional duty on imported filled cheese. SEC. 11. That all filled cheese as herein defined imported from foreign countries shall, in addition to any import duty imposed on the same, pay an internal-revenue tax of eight cents per pound, such tax to be represented by coupon stamps; and such imported filled cheese and the packages containing the same shall be stamped, marked, and branded, as in the case of filled cheese manufactured in the United States.

Penalty. SEC. 12. That any person who knowingly purchases or receives for sale any filled cheese which has not been branded or stamped according to law, or which is contained in packages not branded or marked according to law, shall be liable to a penalty of fifty dollars for each such offense.

Unbranded filled cheese; penalty. SEC. 13. That every person who knowingly purchases or receives for sale any filled cheese from any manufacturer or importer who has not paid the special tax herein provided for shall be liable, for each offense, to a penalty of one hundred dollars and to a forfeiture of all articles so purchased or received, or of the full value thereof.

Destruction of stamps. SEC. 14. That whenever any stamped package containing filled cheese is emptied it shall be the duty of the person in whose hands the same is to destroy the stamps thereon; and any person who willfully neglects or refuses so to do shall, for each such offense, be fined not exceeding fifty dollars or imprisoned not less than ten days nor more than six months.

Scientific test; board of appeal. SEC. 15. That the Commissioner of Internal Revenue is authorized to have applied scientific tests, and to decide whether any substances used in the manufacture of filled cheese contain ingredients deleterious to health. But in case of doubt or contest his decision in this class of cases may be appealed from to a board hereby constituted for the purpose, and composed of the Surgeon-General of the Army, the Surgeon-General of the Navy, and the Secretary of Agriculture, and the decision of this board shall be final in the premises.

Filled cheese, without stamps or impure. SEC. 16. That all packages of filled cheese subject to tax under this act that shall be found without stamps or marks as herein provided, and all filled cheese intended for human consumption which contains ingredients adjudged as hereinbefore provided to be deleterious to the public health, shall be forfeited to the United States.

Recovery of fines. SEC. 17. That all fines, penalties, and forfeitures imposed by this act may be recovered in any court of competent jurisdiction.

Regulations. SEC. 18. That the Commissioner of Internal Revenue, with the approval of the Secretary of the Treasury, shall make all needful regulations for the carrying into effect the provisions of this act.

SEC. 19. That this act shall go into effect on the ninetieth day after its passage, and all wooden packages containing ten or more pounds of filled cheese found on the premises of any dealer on and after the ninetieth day succeeding the date of the passage of this act shall be deemed to be taxable under section nine of this act, and shall be taxed, and shall have affixed thereto the stamps, marks, and brands required by this act or by regulations made pursuant to this act; and for the purpose of securing the affixing of the stamps, marks, and brands required by this act, the filled cheese shall be regarded as having been manufactured and sold or removed from the manufactory for consumption or use on or after the day this act takes effect; and such stock on hand at the time of the taking effect of this act may be stamped, marked, and branded under special regulations of the Commissioner of Internal Revenue, approved by the Secretary of the Treasury; and the Commissioner of Internal Revenue may authorize the holder of such packages to mark and brand the same and to affix thereto the proper tax-paid stamps.

FIFTY-FIFTH CONGRESS, Session I, Chapter 11.

AN ACT to provide revenue for the Government and to encourage the industries of the United States. (Approved July 24, 1897.)

That on and after the passage of this act, unless otherwise specially provided for in this act, there shall be levied, collected, and paid upon all articles imported from foreign countries and mentioned in the schedules herein contained, the rates of duty which are, by the schedules and paragraphs, respectively prescribed, namely:

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SCHEDULE G.—Agricultural products and provisions.

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Dairy products:

- Rates of duty on dairy products.** 236. Butter and substitutes therefor, six cents per pound.
 237. Cheese and substitutes therefor, six cents per pound.
 238. Milk, fresh, two cents per gallon.
 239. Milk, preserved, or condensed, or sterilized by heating or other processes, including weight of immediate coverings, two cents per pound; sugar of milk, five cents per pound.

ALABAMA.

ACTS OF 1894-95, No. 406 (S. 362).

AN ACT to prevent deception in the manufacture and sale of imitation butter. (Approved February 18, 1896.)

SECTION 1. That no person by himself, or agents, or servants shall render and manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell or serve to persons, guests, boarders, or inmates in any hotel, eating house, restaurant, dining car, or boarding house, or public or private hospital, school, or penal institution, any article, product, or compound made wholly or partly out of any fat, oil, oleaginous substance, or compound thereof not produced directly, and at the time of manufacture, from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure, unadulterated milk or cream from the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in such manner as will advise the consumer of its real character, free from coloration or ingredients that cause it to look like butter, by having it stamped with its true name.

SEC. 2. That whoever violates any of the provisions of section one of this act shall be guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than twenty dollars nor more than one hundred dollars.

ARKANSAS.

ACTS AND RESOLUTIONS OF 1885, Act CXXVII.

AN ACT to prevent deception in the sale and use of butter. (Approved April 2, 1885.)

Brand required for butter substitutes. SECTION 1. Whoever shall sell any article, substance, or compound made in imitation or semblance of butter, or as a substitute for butter, and not made exclusively or wholly of milk or cream, or containing any fats, oils, or grease not produced from milk or cream, shall have the words "Adulterated butter;" or if such substitute is a compound known as oleomargarine or butterine, or if it is known by any other name, the word "Oleomargarine," "Butterine," or such other name as shall properly describe it, shall be stamped, labeled, or marked in printed letters of plain Roman type, not less than one inch in length, so that said word or words can not be easily defaced, upon the top and side of every tub, firkin, box, or package containing any of said article, substance, or compound; and in case of retail sales of any of said article, substance, or compound the seller shall attach, or cause to be attached, to each package so sold at retail, and deliver with said package to the purchaser, a label or wrapper, bearing in a conspicuous place upon the outside of said package the words "Adulterated butter," or the word "Oleomargarine," "Butterine," or such other word or words as will correctly describe the article, substance, or compound sold, as hereinbefore provided, in printed letters of plain Roman type not less than one-half inch in length.

Penalty. SEC. 2. Whoever shall sell or expose for sale, or has in his possession with intent to sell, any article, substance, or compound made in imitation or semblance of butter, or as a substitute for butter, except as is provided in section one of this act, and whoever shall deface, erase, cancel, or remove any mark, stamp, brand, label, or wrapper provided for by this act, or change the contents of any box, tub, article, or package, marked, stamped, or labeled as aforesaid, with intent to deceive as to the contents of said box, tub, article, or package, shall be guilty of a misdemeanor and, upon conviction, shall be fined in any sum not less than fifty dollars nor more than five hundred dollars.

Butter substitutes must be labeled if sold at hotels, etc.

SEC. 3. If any hotel, inn, restaurant or boarding-house keeper shall set before his guest at any meal any of said article, substitute, or compound, the dish or plate holding the same shall have clearly and indelibly marked on some prominent part thereof the words "Adulterated butter," or the word "Oleomargarine," "Butterine," or such other word or words as may correctly describe the article, substance, or compound in said dish or plate.

Penalty. SEC. 4. Whoever shall violate the provision of section three of this act shall be guilty of a misdemeanor and, on conviction, shall be fined in any sum not less than five dollars nor more than one hundred dollars.

Butter defined. SEC. 5. The term "butter" shall be understood to mean the product usually known by that name, which is manufactured exclusively from milk and cream.

In effect. SEC. 6. This act shall take effect and be in force from and after its passage.

CALIFORNIA.

STATUTES OF 1893, Chapter 137.

AN ACT entitled an act to prevent the sale of short-weight rolls of butter. (Approved March 11, 1893.)

Short-weight butter. SECTION 1. Any person or persons, firm or corporation, who offers for sale roll butter not of full weight to each roll, shall be guilty of a misdemeanor.

In effect. This act shall go into effect sixty days after its passage.

STATUTES OF 1897, Chapter 76.

AN ACT defining the different grades of cheese and for branding the same, manufactured in the State of California. (Approved March 4, 1897.)

Cheese brands required. SECTION 1. Every person or persons, firm, or corporation, who shall at any creamery, cheese factory, or private dairy manufacture cheese in the State of California, shall, at the place of manufacture,

brand distinctly and durably on the bandage of each and every cheese manufactured, and upon the package or box, when shipped, and grade of cheese manufactured, as follows: "California full-cream cheese," "California half-skim cheese," and "California skim cheese."

Dairy bureau issues and records brands. SEC. 2. All brands for branding the different grades of cheese shall be procured from the State dairy bureau, and said bureau is hereby directed and authorized to issue to all persons, firms, or corporations, upon application therefor, uniform brands, consecutively numbered, of the different grades specified in section one of this act. The State dairy bureau shall keep a record of each and every brand issued, and the name and location of the manufacturer receiving the same. No manufacturer of cheese in the State of California, other than the one to whom such brand is issued, shall use the same, and in case of a change of location, the party shall notify the bureau of such change.

Three grades of cheese defined. SEC. 3. The different grades of cheese are hereby defined as follows: Such cheese only as shall have been manufactured from pure milk, and from which no portion of the butter fat has been removed by skimming or other process, and having not less than thirty per cent of butter fat, shall be branded as "California full-cream cheese;" and such cheese only as shall be made from pure milk, and having not less than fifteen per cent of butter fat, shall be branded "California half-skim cheese;" and such cheese only as shall be made from pure skim milk shall be branded "California skim cheese:" *Provided*, That nothing in this section shall be construed to apply to "Edam," "Brickstein," "Pineapple," "Limburger," Swiss, or hand-made cheese, not made by the ordinary Cheddar process.

All cheese to be branded. SEC. 4. No person or persons, firms or corporations, shall sell, or offer for sale, any cheese manufactured in the State of California, not branded by an official brand and of the grade defined in section three of this act.

Penalty. SEC. 5. Whoever shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof, be punished for the first offense by a fine of not less than twenty-five dollars (\$25) nor more than fifty dollars (\$50), or by imprisonment in the county jail for not exceeding twenty-five days; and for each subsequent offense by a fine of not less than fifty dollars (\$50) nor more than one hundred dollars (\$100), or by imprisonment in the county jail not less than fifty days nor more than one hundred days, or by both such fine and imprisonment, at the discretion of the court.

Acts repealed. SEC. 6. All acts or parts of acts inconsistent with this act are hereby repealed.

In effect. SEC. 7. This act shall take effect sixty days after its passage.

STATUTES OF 1897, Chapter 75.

AN ACT to prevent deception in the manufacture and sale of butter and cheese, to secure its enforcement, and to appropriate money therefor. (Approved March 4, 1897.)

Imitation butter and cheese defined. SECTION 1. That for the purposes of this act, every article, substance, or compound, other than that produced from pure milk or cream from the same, made in the semblance of butter, and designed to be used as a substitute for butter made from pure milk or cream from the same, is hereby declared to be imitation butter: and that for the purposes of this act, every article, substance, or compound, other than that produced from pure milk or cream from the same, made in the semblance of cheese, and designated to be used as substitute for cheese made from pure milk or cream from the same, is hereby declared to be imitation cheese: *Provided*, That the use of salt, rennet, and harmless coloring matter for coloring the product of pure milk or cream shall not be construed to render such product an imitation: *And provided*, That nothing in this section shall prevent the use of pure skimmed milk in the manufacture of cheese.

Imitation butter and cheese, colored, etc., prohibited. SEC. 2. No person, by himself or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, or use, or serve to patrons, guests, boarders, or inmates in any hotel, eating house, restaurant, public conveyance or boarding house, or public or private hospital, asylum, or eleemosynary or penal institution, any article, product, or compound made wholly or partly out of any fat, oil, or

oleaginous substance or compound thereof, not produced directly and at the time of manufacture from unadulterated milk or cream from the same, which article, product, or compound shall be colored in imitation of butter or cheese produced from unadulterated milk or cream from the same: *Provided*, That nothing in this section shall be construed to prohibit the manufacture or sale, under the regulations hereinafter provided, of substances or compounds, designed to be used as an imitation, or as a substitute for butter or cheese made from pure milk or cream from the same, in a separate and distinct form, and in such a manner as will advise the consumer of its real character, free from coloration, or ingredients, that causes it to look like butter or cheese made from pure milk or cream, the product of the dairy.

Substitutes to be marked. SEC. 3. Each person who, by himself or another, lawfully manufactures any substance designed to be used as a substitute for butter or cheese, shall mark by branding, stamping, or stenciling upon the top and sides of each tub, firkin, box, or other package in which such article shall be kept, and in which it shall be removed from the place where it is produced, in a clear and durable manner, in the English language, the words "Substitute for butter," or "Substitute for cheese," as the case may be, in printed letters in plain roman type, each of which shall not be less than one inch in height by one-half inch in width, and in addition to the above shall prepare a statement, printed in plain Roman type, of a size not smaller than pica, stating in the English language its name, and the name and address of the manufacturer, the name of the place where manufactured or put up, and also the names and actual percentages of the various ingredients used in the manufacture of such imitation butter or imitation cheese; and shall place a copy of said statement within and upon the contents of each tub, firkin, box, or other package, and next to that portion of each tub, firkin, box, or other package as is commonly and most conveniently opened; and shall label the top and sides of each tub, firkin, box, or other package by affixing thereto a copy of said statement, in such manner, however, as not to cover the whole or any part of said mark of "Substitute for butter," or "Substitute for cheese."

Substitutes not to be transported unless marked as above. SEC. 4. No person, by himself or another, shall knowingly ship, consign, or forward by any common carrier, whether public or private, any substance designed to be used as a substitute for butter or cheese, unless the same be marked and contain a copy of the statement, and be labeled as provided by section three of this act; and no carrier shall knowingly receive the same for the purpose of forwarding or transporting, unless it shall be manufactured, marked, and labeled as hereinbefore provided, consigned, and by the carrier receipted for by its true name: *Provided*, That this act shall not apply to any goods in transit between foreign States and across the State of California.

Substitutes to be constantly kept marked. SEC. 5. No person, or his agent, shall knowingly have in his possession or under his control any substance designed to be used as a substitute for butter and cheese, unless the tub, firkin, box, or other package containing the same, shall be clearly and durably marked and contain a copy of the statement and be labeled as provided by section three of this act; and if the tub, firkin, box, or other package be opened, then a copy of the statement described in section three of this act shall be kept, with its face up, upon the exposed contents of said tub, firkin, box, or other package: *Provided*, That this section shall not be deemed to apply to persons who have the same in their possession for the actual consumption of themselves or family.

Character of substitute to be furnished at time of sale. SEC. 6. No person, by himself or another, shall sell, or offer for sale, or take orders for the future delivery of, any substance designed to be used as a substitute for butter or cheese, under the name of or under the pretense that the same is butter or cheese; and no person, by himself or another, shall sell any substance designed to be used as a substitute for butter or cheese, unless he shall inform the purchaser distinctly, at the time of the sale, that the same is a substitute for butter or cheese, as the case may be, and shall deliver to the purchaser, at the time of the sale, a separate and distinct copy of the statement described in section three of this act; and no person shall use in any way, in connection or association with the sale, or exposure for sale, or advertisement, of any substance designed to be used as a substitute for butter or cheese, the words "butterine," "creamery," or "dairy," or the representation of any breed of dairy cattle, or any combination of such words and representation, or any other words or symbols, or

combinations thereof, commonly used by the dairy industry in the sale of butter or cheese.

Notification of use of substitutes. SEC. 7. No keeper or proprietor of any bakery, hotel, boarding house, restaurant, saloon, lunch counter, or other place of public entertainment, or any person having charge thereof, or employed thereat, or any person furnishing board for others than members of his own family, or for any employees where such board is furnished as the compensation or as a part of the compensation of any such employee, shall place before any patron or employee, for use as food, any substance designed to be used as a substitute for butter and cheese, unless the same be accompanied by a copy of the statement described in section three of this act, and by a verbal notification to said patron that such substance is a substitute for butter or cheese.

No action for a sale. SEC. 8. No action can be maintained on account of any sale or other contract made in violation of, or with intent to violate, this act by or through any person who was knowingly a party to such wrongful sale or other contract.

Character of substitutes presumed to be known. SEC. 9. Every person having possession or control of any substance designed to be used as a substitute for butter or cheese which is not marked as required by the provisions of this act shall be presumed to have known, during the time of such possession or control, that the same was imitation butter or imitation cheese, as the case may be.

Erasing marks. SEC. 10. No person shall efface, erase, cancel, or remove any mark, statement, or label provided for by this act, with intent to mislead, deceive, or to violate any of the provisions of this act.

Substitutes not permitted in State institutions. SEC. 11. No butter or cheese not made wholly from pure milk or cream, salt, harmless coloring matter shall be used in any of the charitable or penal institutions that receive assistance from the State.

Penalty. SEC. 12. Whoever shall violate any of the provisions or sections of this act shall be deemed guilty of a misdemeanor, and shall, upon conviction thereof, be punished, for the first offense, by a fine of not less than fifty dollars nor more than one hundred and fifty dollars, or by imprisonment in the county jail for not exceeding thirty days, and for each subsequent offense by a fine of not less than one hundred and fifty dollars nor more than three hundred dollars, or by imprisonment in the county jail not less than thirty days nor more than six months, or by both such fine and imprisonment, in the discretion of the court. **Disposition of fines.** One-half of all the fines collected under the provisions of this act shall be paid to the person or persons furnishing information upon which conviction is procured.

Possession a misdemeanor. SEC. 13. Whoever shall have possession or control of any imitation butter or imitation cheese, or any substance designed to be used as a substitute for butter or cheese, contrary to the provisions of this act, shall be construed to have possession of property with intent to use it as a means of committing a public offense, within the meaning of chapter three, of title twelve, of part two, of an act to establish a penal code: *Provided*, That it shall be the duty of the officer who serves a search warrant issued for imitation butter or imitation cheese, or any substance designed to be used as a substitute for butter or cheese, to deliver to the agent of the dairy bureau, or to any person

Taking samples. by such dairy bureau authorized in writing to receive the same, a perfect sample of each article seized by virtue of such warrant, for the purpose of having the same analyzed, and forthwith to return to the person from whom it was taken the remainder of each article seized as aforesaid. If any sample be found to be imitation butter or imitation cheese, or substance designed to be used as a substitute for butter or cheese, it shall be returned to and retained by the magistrate as and for the purpose contemplated by section fifteen hundred and thirty-six of an act to establish a penal code; but if any sample be found not to be imitation butter or imitation cheese, or a substance designed to be used as a substitute for butter or cheese, it shall be returned forthwith to the person from whom it was taken.

District attorney to prosecute. SEC. 14. It shall be the duty of the district attorney, upon the application of the dairy bureau, to attend to the prosecution, in the name of the State, of any suit brought for the violation of any of the provisions of this act within his district.

State dairy bureau. SEC. 15. The governor shall, on or before the first day of July, eighteen hundred and ninety-seven, appoint three resident citizens of this State, who shall have practical experience in the manufacture of dairy products, to constitute a State dairy bureau, and which shall succeed the one now in existence in every respect. Members of this bureau shall hold office for the period of four years from and after the first day of July, eighteen hundred and ninety-seven, and until their successors are appointed and qualified: *Provided*, That the first members appointed under the provisions of this act shall at their first meeting so classify themselves by lot as that one shall go out of office at the expiration of two years, one at the expiration of three years, and the other at the expiration of four years. Any vacancy shall be filled by appointment by the governor for the unexpired term. The members of said bureau shall serve without compensation, and within twenty days after their appointment shall take the oath of office, as required by the constitution, and they shall thereupon meet and organize by electing a chairman and treasurer. Any one of them may be removed by the governor for neglect or violation of duty. They shall make a report in detail to the legislature not later than the first day of December next preceding the meetings thereof.

Duty. SEC. 16. It shall be the duty of the State dairy bureau to secure, as far as possible, the enforcement of this act. The State dairy bureau shall have power to employ an agent at a salary of twelve hundred dollars a year, and such assistants or chemists as from time to time may be necessary therefor.

Annual appropriation. SEC. 17. There is hereby appropriated for the use of this State dairy bureau, out of any money in the State treasury not otherwise appropriated, the sum of five thousand dollars for each fiscal year hereafter, and commencing with the forty-ninth fiscal year. All salaries, fees, costs, and expenses of every kind incurred in the carrying out of the law shall be drawn from the sum so appropriated, and the State controller shall draw his warrant on the State treasurer in favor of the person entitled to the same.

Repealing clause. SEC. 18. All acts and parts of acts inconsistent with this act are hereby repealed.

In effect. SEC. 19. This act shall take effect immediately.

COLORADO.

LAWS OF 1896, Chapter 19.

AN ACT to create the office of State dairy commissioner and to define his duties; and to regulate the manufacture and sale of all products of the dairy and all imitations thereof; and to provide the penalty for violations thereof; and making appropriations therefor; and to repeal an act entitled "An act to regulate the manufacture and sale of oleomargarine, creating the office of State dairy commissioner and defining his duties, and making appropriation therefor," approved April 12, 1893, and all acts and parts of acts inconsistent with the provisions of this act. (Approved April 1, 1896.)

Appointment of dairy commissioner. SECTION 1. The governor, by and with the advice and consent of the senate, shall appoint a commissioner, who shall be a practical dairyman actually engaged in the business, and who shall be at the time of his appointment and for at least one year preceding his appointment, known as the Colorado State dairy commissioner, who shall be a citizen of the State, and who shall hold his office for the term of two years, or until his successor is appointed and qualified, and who shall receive the sum of twelve hundred dollars per year, payable monthly. Said commissioner shall be appointed within ten days after the passage of this act, and shall be charged, under the direction of the governor, with the enforcement of the various provisions thereof. Said commissioner may be removed from office for cause, to be assigned by the governor, and his successor appointed as above provided for. Said commissioner shall make semiannual reports to the governor, not later than June 20 and December 20 of each year, of his work and proceedings; and the secretary of state shall furnish said dairy commissioner with a proper office, office furniture, and all stationery, etc., necessary to the proper conduct of said office.

Deputy commissioner. SEC. 2. The said commissioner shall have the power to appoint a deputy, whose salary shall not exceed one thousand dollars per year, to be paid monthly. He is also authorized and empowered, by and with the consent and approval of the governor, to employ a practical chemist, who shall receive ten dollars per day for each day necessarily engaged.

Traveling expenses. SEC. 3. Said commissioner and his deputy shall be entitled to their necessary and actual traveling expenses incurred in the discharge of their official duties, to be paid at the end of each calendar month upon duly certified and itemized bills, to be approved by the governor.

Products in imitation of pure cheese or yellow butter prohibited. SEC. 4. Every person who, by himself or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in their possession with intent to sell or use or serve to patrons, guests, boarders, or inmates in any hotel, eating house, restaurant, or public conveyance or boarding house, or public or private hospital, asylum, school, or eleemosynary or penal institution, any article, product, or compound made wholly or partly out of any fat, oil, or oleaginous substance or compound thereof not reduced directly and at the time of manufacture from unadulterated milk or cream from the same, which shall be in imitation of cheese or yellow butter produced from pure, unadulterated milk or cream from the same, shall be deemed guilty of a misdemeanor and punished as hereinafter provided: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine or filled cheese in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like cheese or yellow butter.

Cheese brands required. SEC. 5. Every person who shall, at any cheese factory in the State, manufacture cheese, and shall fail, at the factory where it was made, to distinctly and durably stamp on the bandage of every such cheese and on the box containing the same, in full-faced capital letters, the grade of the same, as "Colorado full cream," "skim," or "imitation" cheese, as hereinafter defined, shall be deemed guilty of a misdemeanor and punished as hereinafter provided. Brands and stencils for stamping shall be procured of the State dairy commissioner.

Grades of cheese defined. SEC. 6. The State dairy commissioner is hereby authorized to issue to each cheese factory in the State, upon proper application therefor, uniform stencils or brands, to be used as hereinafter provided in section 5¹ of this act. All cheese containing not less than 35 per cent of butter fat in comparison with the total solids shall be branded "Colorado full-cream cheese." All containing less than the above-prescribed amount of fat shall be branded "Skim cheese." All cheese into which any foreign fats or other oleaginous substance or substances or the fats from stale, rancid, foul, or impure butter have been introduced shall be branded "Imitation cheese."

Brands to be recorded. SEC. 7. The State dairy commissioner shall issue brands provided for in section 6 upon proper application therefor, and shall keep a book in his office, which book shall contain a record of the number of each brand issued and the names and location of the factory receiving the same; and no factory other than the one to which such brand is issued shall use the same.

Securing evidence. SEC. 8. The Colorado dairy commissioner shall have power, in the discharge of the duties of his office, to examine under oath or otherwise any person whom he may believe has knowledge concerning the sale or use of imitations of butter or cheese. He is empowered to issue any subpoena requiring the appearances of witnesses and the production of books and papers, and administer oaths with like effect as is done in courts of law in this State; and it shall be the duty of any district court or the judge thereof, or county court or judge thereof, upon application by said commissioner, to issue an attachment for such witnesses and compel him or them to attend before the commissioner and give testimony upon such matters as he or they shall be lawfully required by such commissioner; and said court or judge shall have power to punish for contempt or in other cases of refusal to obey the order and process of the court.

Prosecution. SEC. 9. Inspectors of milk in cities and corporated towns and the Colorado State dairy commissioner or his deputy shall, and any other person who knows the facts may, institute complaint before any justice of the peace or county court, and the district attorney or his deputies shall file information in the district court for the violation of the provisions of this act whenever they have reasonable cause to believe that any of its provisions have been violated; and it shall be the duty of the district attorney or his deputies to prosecute any

¹ So in original.

such complaints or informations to conviction in the courts where the same may have been instituted.

Obtaining evidence. SEC. 10. It shall be the duty of said dairy commissioner or his deputies or any inspectors of milk in cities to enter all places where they have good reason to believe that butter or cheese or imitations thereof may be stored or kept for sale, or kept for the purpose of being offered for the use of patrons or customers, and to take samples of suspected butter or cheese or the imitation thereof, and cause them to be analyzed or otherwise satisfactorily tested by a practical chemist; and such analysis or test shall be recorded and preserved as evidence; and the certificate of such result, sworn to by such chemist, shall be admitted in evidence in all prosecutions under this act: *Provided*, That the person accused may by subpoena compel the attendance in court of such chemist. The expense of such analysis or test, to be determined by the court, not exceeding twenty dollars in any one case, may be included in the cost of such prosecution.

Penalty. SEC. 11. Whoever hinders or obstructs or in any way interferes with the said dairy commissioner or his deputies or with such inspector of milk in the performance of his or their duty, as aforesaid, shall be punished by a fine of fifty dollars for the first offense, and one hundred dollars for each subsequent offense, and stand committed to the county jail till such fine is paid, as provided by law.

Penalty. SEC. 12. Whoever violates any of the provisions of sections 4 and 6 of this act shall be punished by a fine of not less than one hundred dollars, nor more than five hundred dollars, and shall stand committed to the county jail until such fine is paid, as provided by law, or by imprisonment in the county jail for a term of not exceeding one year.

SEC. 13. This act shall not be construed to impair or prevent the prosecution and punishment of any violations of law existing at the time of its passage and committed prior to its taking effect.

Disposition of fines. SEC. 14. All fines imposed by this act, or by the authority thereof, shall be paid, when collected, into the general school fund of the county wherein the conviction shall be had.

Appropriation. SEC. 15. There is hereby appropriated, out of any money in the State treasury not otherwise appropriated, the sum of four thousand dollars, or so much thereof as may be necessary for the purpose of paying the salaries and expenses of the State dairy commissioner, deputy dairy commissioner, as follows: For the salaries and expenses of said State dairy commissioner, deputy dairy commissioner, for the year 1895, the sum of two thousand dollars; for the salaries and expenses of said State dairy commissioner, deputy dairy commissioner, for the year 1896, the sum of two thousand dollars.

Acts repealed. SEC. 16. An act to regulate the manufacture and sale of oleomargarine, creating the office of State dairy commissioner and defining his duties and making an appropriation therefor, approved April 12, 1893, and all acts inconsistent with the provisions of this act are hereby repealed.

Repealing clause. SEC. 17. All acts or any parts of acts inconsistent with the provisions of this act are hereby repealed.

In effect. SEC. 18. In the opinion of the general assembly an emergency exists; this act to take effect from and after its passage.

CONNECTICUT.

GENERAL STATUTES, REVISION OF 1887.¹

Imitation butter defined. SEC. 2614 (as amended by section 1, chapter 114, Public Acts 1893). Any article resembling butter in appearance and not made wholly, salt and coloring excepted, from the milk of cows, shall be imitation butter within the meaning of this chapter. The words "butter," "dairy," or "creamery" shall form neither the whole nor a part of the name of any imitation butter nor appear upon any article or upon any box, tub, or package containing imitation butter.

¹ 2614, 2617, 2619 = Laws 1886, chapter 123. 2615, 2616, 2618 = Laws 1886, chapter 123; 1887, chapter 74. 2656-2663 = Laws 1882, chapter 145. 2664 = Laws 1890, chapter 12.

Products in imitation of pure yellow butter prohibited. SEC. 2615 (as amended by section 2, chapter 114, Public Acts 1898, and section 1, chapter 32, Public Acts 1895). No person, by himself or his agent

or servants, shall render or manufacture, sell, offer for sale, expose for sale, take orders for the future delivery of, or have in his possession with intent to sell, any article, product, or compound made wholly or partly out of any fat, oil, or oleaginous substance or compound thereof not produced from unadulterated milk or cream from the same which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same: *Provided*, That nothing in this Oleomargarine permitted, when, act shall be construed to prohibit the manufacture

or sale of oleomargarine in a separate and distinct form and in such manner as will advise the consumer of its real character, free from coloration or any ingredient that causes it to look like butter. No imitation butter shall be sold or exposed for sale or delivered except under the following

conditions: First, the seller shall maintain in plain sight, over or next the main outer entrance of the premises where the selling is done, a sign bearing in plain, black Roman letters, not less than two inches wide and four inches long, on a white ground, the words "sold here," preceded by the name of the imitation article. If the selling is done

from a wagon or other vehicle, such vehicle shall conspicuously bear upon its outside, on both sides of said wagon or vehicle, such a sign. If the delivering is done from a wagon or other vehicle, such vehicle shall conspicuously bear upon its outside, on both sides of said wagon or vehicle, a sign bearing in plain, black Roman letters, not less than two inches wide and four inches long, on a white ground, the words "delivered here," preceded by the name of the imitation

article. Second, all imitation butter shall be kept in an enclosing package, which shall bear on the outside of its body and also of its cover, at all times, in plain sight of a beholder of the package, in black Roman letters not less than one inch wide and two inches long, on a white or light-colored ground, the name of the imitation article. Third, the seller shall orally inform

each buyer at each sale that the article he buys is not butter, and shall give the buyer the name of the imitation article. Fourth, every person, copartnership, or corporation selling or offering for sale any imitation butter, and every keeper of a hotel, boarding house, or restaurant, temporary or permanent, who shall furnish any guest with any imitation butter, or food containing it, shall, within fifteen days after the passage of this act, or within fifteen days after commencing said business, and annually on the first day of May or within fifteen days thereafter, register, in a book

kept by the dairy commissioner for that purpose, the name and the town, street and number of street, of the place of business of said person, copartnership, corporation, keeper of hotel, boarding house, or restaurant.

All signs prescribed in sections 2615, 2616, and 2617 of the general statutes shall be provided by the dairy commissioner, and all signs required under provisions of section 2615 of the general statutes to be maintained in plain sight over or next the main outer entrance of the premises where the selling is done shall be placed in position under the direction of the dairy commissioner or his deputy. All signs so furnished by the dairy commissioner shall be paid for by the parties receiving the same, the same to be furnished at the actual cost thereof.

Bakers, etc., must display signs. SEC. 2616. No baker or vendor of food shall sell or expose for sale any article of food containing imitation butter, unless such baker or vendor shall maintain the same kind of a sign as hereinbefore first prescribed, in the way and manner prescribed in that connection, except that the word "used" shall be substituted for the word "sold." If the selling be done from a wagon or other vehicle, such vehicle shall conspicuously bear such a sign.

Hotels, etc., must display signs. SEC. 2617. No keeper of a hotel, boarding house, or restaurant, temporary or permanent, shall furnish any guest with any imitation butter, or food containing it, unless such keeper shall maintain in plain sight of all guests sitting at tables where food is served such a sign or signs as hereinbefore prescribed, except that the word "used" shall be substituted for the word "sold."

Appointment of dairy commissioner. SEC. 2618 (as amended by section 3, chapter 114, Public Acts 1898). The governor shall appoint a citizen of the State as a dairy commissioner, who shall hold office for two years from and after the first day of May succeeding his appointment, and until his successor is appointed, unless sooner removed by the governor for cause; and in case

of his death, resignation, or removal the governor shall fill the vacancy. It shall be the duty of the dairy commissioner to attend to the enforcement of this chapter throughout the State. A room in the capitol shall be set apart for the dairy commissioner. He may appoint and remove a deputy, who may also act as clerk. The dairy commissioner and his deputy shall have free access at all reasonable hours, for the purpose of examining into any suspected violation of this chapter, to all places and premises, apartments of private families keeping no boarder excepted, where the dairy commissioner or his deputy suspects imitation butter to be made, sold, or used, kept, or stored in transit, and on tender of the market price of good butter for the same may take from any person, firm, or corporation samples of any articles suspected to be imitation butter. And it shall be the duty of agents of Railroad and express companies, railroad and express companies having knowledge or record of any consignment of imitation butter to inform the commissioner or his deputy of such consignment and the name of the consignee when requested by said commissioner or his deputy. The dairy commissioner may have samples suspected to be imitation butter analyzed at the Connecticut Experiment Station or by any State chemist, and a sworn or affirmed certificate after analysis shall be *prima facie* evidence of the ingredients and constituents of the sample analyzed. Anyone refusing the dairy commissioner or his deputy access in a reasonable manner and at a reasonable time to premises for said purpose of examination, or refusing to sell samples, as hereinbefore provided for, shall incur the penalty hereinafter first provided for violations of this chapter. The dairy commissioner shall make an annual report to the governor, and such annual reports shall be submitted to the general assembly at its regular session.¹

Penalty. SEC. 2619 (as amended by section 4, chapter 114, Public Acts 1893). Any person violating any of the provisions of sections 2614, 2615, or 2616, and any person except a boarding-house keeper violating section 2617 shall for the first offense be fined not more than one hundred dollars or imprisoned not more than sixty days, or both; for any subsequent offense said fine and imprisonment shall be doubled. Any boarding-house keeper violating section 2617 shall, for the first offense, be fined twenty-five dollars or imprisoned not exceeding thirty days, or both; for any subsequent offense said fine and imprisonment last mentioned shall be doubled. Evidence of any violation of this chapter shall be *prima facie* evidence of wilful violation with knowledge.

Adulterated milk; penalty. SECTION 2638. Whoever shall knowingly sell, supply, or bring to be manufactured to any butter or cheese manufactory in this State any milk diluted with water, or adulterated by the addition of any foreign substance, or from which any cream or milk commonly known as strippings has been taken; or whoever shall knowingly bring or supply milk to any butter or cheese manufactory that is tainted or partly sour, shall forfeit not less than twenty-five nor more than one hundred dollars, with costs of suit, for the benefit of the person or persons upon whom such fraud shall be committed.

Proof of adulteration. SEC. 2659. The usual test for quality and the certificate of analysis of the director of the Connecticut Agricultural Experiment Station shall be deemed *prima facie* proof of adulteration.

Skim milk must be labeled. SEC. 2660. No person shall sell, offer, or expose for sale any milk from which the cream or any part thereof has been removed, without distinctly and durably affixing a label, tag, or mark of metal in a conspicuous place upon the outside, and not more than six inches from the top of every can, vessel, or package containing such milk, and such metal label, tag, or mark shall have the words "Skimmed milk" stamped, printed, or indented thereon in letters not less than one inch in height, and such milk shall only be sold or retailed out of a can, vessel, or package so marked.

Adulterated milk prohibited. SEC. 2661. No person shall sell or offer for sale, or shall have in possession with intent to sell or offer for sale, any impure or adulterated milk.

Penalty. SEC. 2662. Every person who shall violate any of the provisions of the two preceding sections shall be fined not more than seven dollars, or imprisoned not more than thirty days, or both.

¹ Salary of dairy commissioner is \$1,500 per annum. Salary of deputy is \$1,200 per annum. Office expenses, \$800 per annum.

Law must be posted. SEC. 2663. A printed notice of this and five preceding sections shall be conspicuously posted in all public places, creameries, or factories where milk is received or sold.

Sale of diseased milk prohibited. SEC. 2664. Any person who shall knowingly sell, or expose for sale, milk or any product of milk, from any cow which shall have been adjudged by the commissioners upon diseases of domestic animals affected with tuberculosis, or other blood disease, shall be fined not more than seven dollars, or imprisoned not more than thirty days, or both.

PUBLIC ACTS 1897, Chapter 145.

AN ACT concerning the selling of tub butter. (Approved May 5, 1897.)

Tub butter in prints, pats, etc., must be labeled. SECTION 1. No person, by himself or his agents or his servants, shall sell, offer for sale, or have in his possession with intent to sell any butter known as "tub butter" which is pressed or printed into what is known as bricks, pats, or balls, except under the following conditions: Every such brick, pat, or ball shall have the words "Tub butter," in one-half inch Roman letters, stamped or pressed upon it, and, if wrapped, the wrapper shall be marked in like manner. It shall be the duty of the dairy commissioner to attend to the enforcement of this act throughout the State; and for this purpose the commissioner and his deputy shall have free access at all reasonable hours to all places and premises where the dairy commissioner or his deputy suspects that any act in violation of this law has been or is being committed.

Penalty. SEC. 2. Any person violating any provision of this act shall be fined not more than one hundred dollars.

In effect. SEC. 3. This act shall take effect from its passage.

PUBLIC ACTS 1896, Chapter 235.

AN ACT regulating the manufacture and sale of food products. (Approved June 26, 1896.)

Sale of adulterated or misbranded food prohibited. SECTION 1. It shall be unlawful for any person, persons, or corporation within this State to manufacture for sale, offer or expose for sale, have in his or their possession for sale, or to sell any article of food which is adulterated or misbranded within the meaning of this act.

Food and "misbranded" defined. SEC. 2. The term food, as used in this act, shall include every article used for food or drink by man, horses, or cattle. The term misbranded, as used in this act, shall include every article of food and every article which enters into the composition of food, the package or label of which shall bear any statement purporting to name any ingredient or substance as not being contained in such article, which statement shall be untrue in any particular; or any statement purporting to name the substance or substances of which such article is made, which statement shall not give fully the names of all substances contained in such article in any measurable quantity.

"Adulterated" defined. SEC. 3. For the purposes of this act, an article shall be deemed adulterated: First, if any substance or substances be mixed or packed with it so as to reduce or lower or injuriously affect its quality or strength; second, if any inferior substance or substances be substituted wholly or in part for the article; third, if any valuable constituent of the article has been wholly or in part abstracted; fourth, if it be an imitation of or sold under the name of another article; fifth, if it is colored, coated, polished, or powdered, whereby damage is concealed, or if it is made to appear better or of greater value than it is; sixth, if it contains poisonous ingredients which may render such article injurious to the health of a party consuming it, or if it contain any antiseptic or preservative not evident and not known to the purchaser or consumer; seventh, if it consists, in whole or in part, of a diseased, filthy, decomposed, or putrid substance, either animal or vegetable, unfit for food, whether manufactured or not, or if it is in any part the product of a diseased animal or of any animal that has died otherwise than by slaughter: *Provided*, That an article of food product shall not be deemed adulterated or misbranded within the meaning of this act in the following cases: (a) In the case of mixtures or compounds which may be now or from time to time hereafter known as articles of food under their own distinctive names and not included in definition fourth of this section;

(b) in the case of articles labeled, branded, or tagged so as plainly and correctly to show that they are mixtures, compounds, combinations, or blends; (c) when any matter or ingredient is added to a food because the same is required for the protection or preparation thereof as an article of commerce in a fit state for carriage or consumption, and not fraudulently to increase the bulk, weight, or measure of the food or to conceal the inferior quality thereof; (d) when a food is unavoidably mixed with some extraneous matter in the process of collection or preparation.

Duties and powers of Agricultural Experiment Station. SEC. 4. The Connecticut Agricultural Experiment Station shall make analyses of food products on sale in Connecticut suspected of being adulterated at such times and places and to such an extent as it may determine, and may appoint such agent or agents as it deems necessary, who shall have free access, at all reasonable hours, for the purpose of examining into any place wherein it is suspected any article of food adulterated with any deleterious or foreign ingredient or ingredients exists, and such agent or agents, upon tendering the market price of said article, may take from any person, firm, or corporation samples of any article suspected of being adulterated as aforesaid, and the said station may adopt or fix standards of purity, quality, or strength when such standards are not specified or fixed by statute.¹

Grand juror to be notified of adulteration. SEC. 5. Whenever said station shall find by its analysis that adulterated food products have been on sale in the State, it shall forthwith transmit the facts so found to a grand juror or prosecuting attorney of the town in which said adulterated food product was found.

Reports on adulterated food products. SEC. 6. The said station shall make an annual report to the governor upon adulterated food products, in addition to the reports required by law, which shall not exceed one hundred and fifty pages, and said report may be included in the report which said station is already authorized by law to make, and such annual reports shall be submitted to the general assembly at its regular session.

Additional appropriation for Experiment Station. SEC. 7. To carry out the provisions of this act, the additional sum of twenty-five hundred dollars is hereby annually appropriated to said Connecticut Agricultural Experiment Station, which sum shall be paid in equal quarterly installments to the treasurer of the board of control of said station, upon the order of the comptroller, who is hereby directed to draw his order for the same.

Penalty. SEC. 8. Any person who, either by himself, his agent, or attorney, with the intent that the same may be sold as unadulterated, adulterates any food products for man, or horses, or cattle, or, knowing that the same has been adulterated, offers for sale or sells the same as unadulterated or without disclosing or informing the purchaser that the same has been adulterated, shall be fined not more than five hundred dollars or imprisoned not more than one year.

SEC. 9. No action shall be maintained in any court in this State on account of any sale or other contract made in violation of this act.

Acts repealed. SEC. 10. All acts and parts of acts inconsistent herewith are hereby repealed.

DELAWARE.

LAWS OF 1887, Chapter 231.

AN ACT for the protection of the public health and to prevent adulteration of dairy products and fraud in the sale thereof. (Passed April 15, 1887.)

Manufacture and sale of imitation of butter or cheese prohibited. SECTION 1. That no person, firm or corporate body shall manufacture out of any oleaginous substance or any compound of the same, other than that produced from unadulterated milk, or by cream from the same, any article designed to take the place of butter or cheese produced from pure unadulterated milk or cream from the same, or by any imitation or adulterated butter or cheese, nor shall sell or offer for sale or have in his, her, or their possession with intent to sell the same as an article of food.

¹Standards have not been fixed.

Contracts for sale unlawful. SEC. 2. Every sale of such article or substance which is prohibited by the first section of this act is hereby declared to be unlawful and void, and no action shall be maintained in any of the courts of this State to recover upon any contract for the sale of any such article or substance.

Penalty. SEC. 3. Every person, company, firm, or corporate body who shall manufacture, sell, or offer, or expose for sale, or have in his, or her, or their possession with intent to sell, any substance the manufacture and sale of which is prohibited by the first section of this act shall for every such offense forfeit and pay the sum of fifty dollars, which shall be recoverable with costs by any person suing in the name of the State as debts of like amount are by law recoverable; one-half of which sum when so recovered shall be paid to the county treasurer for the use of the county in which suit is brought and the other half to the person or persons at whose instance such a suit shall or may be commenced and prosecuted to recovery.

In effect. SEC. 4. That this act shall not take effect until the expiration of three months from its passage.

LAWS OF 1895, Chapter 209.

AN ACT to prevent deception in the manufacture and sale of imitation butter. (Passed May 8, 1895.)

Manufacture of imitation butter unlawful. SECTION 1. No person, by himself, or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product, or compound made wholly or partly out of any fat, oil, or oleaginous substance, or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk, or cream of the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like yellow butter. If any person shall violate any of the provisions of this section he shall be deemed guilty of a misdemeanor and be punishable in the court of general sessions of the peace and jail delivery as hereinafter provided.

Proceedings against suspected person. SEC. 2. That if any person shall make complaint in writing, verified by oath or affirmation, before any justice of the peace, alleging that the complainant has probable cause to suspect, and does suspect and believe, that any other person, by himself or his agents or servants, has rendered or manufactured, sold, offered or exposed for sale, or has in his possession with intent to sell, any article, product, or compound made as aforesaid, in imitation of yellow butter produced as aforesaid, and shall in said complaint describe such article, product, or compound as particularly as may be, and designate the house or place where complainant suspects and believes such article, product, or compound is, and the name of the person suspected as aforesaid, thereupon such justice of the peace may within the limits of his jurisdiction issue his warrant to search such house or place. Such warrant shall be directed to any officer or to any other person by name for service, and shall recite the essential facts alleged in the complaint, and the officer or other person to whom it shall be directed for service as aforesaid shall proceed thereunder as follows:

Powers and duties of officer. He may enter the house or place designated and if he shall find therein what he believes to be any article, product, or compound, made as aforesaid in imitation of yellow butter produced as aforesaid, he shall take therefrom a sample or samples thereof for the purpose of having the same analyzed or tested as hereinafter provided, and to obtain such sample or samples such officer or other person to whom such warrant shall be directed as aforesaid may open any can, vessel, or package by him believed to contain such imitation article, product, or compound, and take therefrom the sample or samples for the purpose aforesaid. The said officer or other person to whom such warrant shall be directed as aforesaid, when so taking a sample or samples of such alleged imitation article, product, or compound as aforesaid, shall then and there divide said sample into two parts as nearly equal as may be, wrap said parts in separate packages, then and

there seal the same and offer one of said parts to the person in whose custody the said article was when taken, with a written notice of the time, place, and date when and where said sample was so taken and that it was taken for the purpose

Analysis by State chemist. of analyzing or testing it. The other part of said sample shall, together with a copy of the written notice last above mentioned, be delivered by said officer, or other person to whom said warrant shall be directed as aforesaid, to the State chemist, who shall cause the same to be analyzed or otherwise satisfactorily tested, the result of which analysis or test he shall record and preserve as evidence.

Return of warrant. That the said officer or other person to whom said warrant shall be directed as aforesaid shall, within one week next ensuing such delivery to the State chemist as aforesaid, return said warrant with his proceedings thereunder and his costs and actual expenses endorsed thereon, to the said

Costs. justice of the peace, the said costs to correspond in amount as nearly as may be with the costs to which an officer serving a search warrant would thereby be entitled to.

Duties of State chemist. The said sample having been delivered to the State chemist as aforesaid, he shall with all convenient speed analyze or test the same, and upon the completion thereof shall forward to the attorney-general a certificate of the result thereof, duly verified by oath or affirmation, and

Evidence. such certificate so verified shall be admitted as evidence before the grand or petit juries in any prosecutions under this act.

Penalty. SEC. 3. That if any person shall be convicted of a violation of any of the provisions of section 1 of this act he shall forfeit and pay to the State of Delaware a fine of not less than fifty dollars nor more than two hundred and fifty dollars, or be imprisoned for a term not exceeding one year, and shall pay the costs of prosecution, among which shall be taxed the costs of the said justice of the peace and the costs and actual expenses endorsed upon said warrant and the charge of the State chemist, whose charge shall not in any one case exceed the

Payment of costs. sum of twenty dollars. In case of failure to convict, the charge of the State chemist and the costs of said justice of the peace and the costs and actual expenses endorsed upon said warrant as aforesaid shall be paid by the county in which the prosecution is conducted: *Provided*, That the amount of money so to be paid by any county shall not exceed in any one year the sum of two hundred dollars.

Label of oleomargarine. SEC. 4. That when any person exposes for sale in this State oleomargarine, butterine, or any substance made in imitation or semblance of pure butter, such person shall have conspicuously upon or across the surface of the exposed contents of every open tub, package, or parcel thereof a placard with the word "Oleomargarine" printed thereon in plain, uncondensed Gothic letters, not less than one inch long, and any person failing to comply with the requirements of this section shall be deemed guilty of a misdemeanor

Penalty. and upon conviction thereof in the court of general sessions of the peace and jail delivery shall be fined not less than fifty dollars, nor more than two hundred and fifty dollars for each offense.

Repealing clause. SEC. 5. That all acts or parts of acts inconsistent herewith are hereby repealed.

DISTRICT OF COLUMBIA.

FIFTY-THIRD CONGRESS, Session III, Chapter 164.

AN ACT to regulate the sale of milk in the District of Columbia, and for other purposes. (Approved March 2, 1895.)

Permit for dairies or dairy farms. SECTION 1. That from and after the passage of this act no person shall, within the District of Columbia, keep or maintain a dairy or dairy farm without a permit so to do from the health officer of said District: application for said permit shall be made in writing, upon a form prescribed by said health officer: *Provided*, That no applicant for said permit shall be restrained from conducting business until said application has been acted upon by the health officer of the District of Columbia or his duly appointed agent. It shall be the duty of said health officer, upon receipt of said application

Examination of premises. in due form, to make or cause to be made an examination of the premises which it is intended to use in the maintenance of said dairy or dairy farm; if after such examination said premises are

found to conform to the regulations governing dairies and dairy farms within the District of Columbia, said health officer shall issue the permit hereinbefore specified, without charge: *Provided*, That said permit may be suspended or revoked at any time, without notice, by said health officer whenever the milk supply from said dairy or dairy farm is exposed to infection by Asiatic cholera, anthrax, diphtheria, erysipelas, scarlet fever, smallpox, splenic fever, tuberculosis, typhoid fever, typhus fever, or yellow fever, so as to render its distribution dangerous to public health.

Permit to bring milk into the District. SEC. 2. That no person shall bring or send into the District of Columbia for sale any milk without a permit so to do from the health officer of said District; application for said permit shall be made in writing, upon a form prescribed by said health officer, and shall be accompanied by such detailed description of the dairy farm or dairy where said milk is produced or stored as said health officer may require, and by a sworn statement as to the physical condition of the cattle supplying said milk: *Provided*, That no applicant for said permit shall be restrained from conducting business until said application has been acted upon by the health officer of the District of Columbia or his duly appointed agent. If after examination of said application said health officer is satisfied that said milk will be brought into the District of Columbia for sale or consumption without danger to public health, he shall issue, without charge to the applicant, a permit so to do, on condition that none but pure and unadulterated milk shall be, with knowledge of its impurity, brought into said District; that in the management of said dairy or dairy farm said applicant shall be governed by the regulations of the health office of the District of Columbia, approved by the Commissioners of the District of Columbia, issued for dairies and dairy farms in said District, when said regulations do not conflict with the law of the State in which said dairy or dairy farm is located, and that said dairy or dairy farm may be inspected at any time without

Inspection of dairies. notice by the health officer of the District of Columbia or his duly appointed representative: *Provided*, That said permit may be suspended or revoked at any time without notice by said health officer whenever the milk supply from said dairy or dairy farm is exposed to infection by Asiatic cholera, anthrax, diphtheria, erysipelas, scarlet fever, smallpox, splenic fever, tuberculosis, typhoid fever, typhus fever or yellow fever, so as to render its distribution dangerous to public health.

Contagious diseases and dairy farms. SEC. 3. That no person suffering from, or who has knowingly, within a period specified by the health officer of the District of Columbia, been exposed to diphtheria, scarlet fever, erysipelas, smallpox, anthrax, or other dangerous contagious disease, shall work or assist in or about any dairy or dairy farm; no proprietor, manager, or superintendent of any dairy or dairy farm within the District of Columbia shall knowingly permit any person suffering, or exposed as aforesaid, to work or assist in or about said dairy or dairy farm.

Signs on wagons. SEC. 4. That all milk wagons shall have the name of the owner, the number of permit, and the location of dairy from which said wagons haul milk, painted thereon plainly and legibly.

Grocers, bakers, and other dealers. SEC. 5. That all grocers, bakers, and other persons having or offering for sale milk shall at all times keep the name or names of the dairymen from whom the milk on sale shall have been obtained posted up in a conspicuous place wherever such milk may be sold or kept for sale.

Unwholesome milk prohibited. SEC. 6. That no person shall offer or have for sale in the District of Columbia any unwholesome, watered, or adulterated milk, or milk known as swill milk, or milk from cows that are fed on swill, garbage, or other like substance, nor any butter or cheese made from any such milk.

Milk standard. SEC. 7.¹ That no person shall knowingly offer or have for sale any milk containing more than eighty-eight per cent of watery fluid and less than twelve per cent of total milk solids, of which at least three per cent shall be fat.

Skimmed milk standard. SEC. 8. That no person shall sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, skimmed milk containing less than nine and three-tenths per cent of milk solids, inclusive of fat.

¹ Milk standard changed by section 8 of food and drug act below.

Skimmed milk must be labeled. SEC. 9. That no dealer in milk, and no servant or agent of such a dealer, shall sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, milk from which the cream, or any part thereof, has been removed, unless in a conspicuous place, above the center or upon the outside of every vessel, can, or package thereof, in which milk is sold, the words "skimmed milk" are distinctly marked in Gothic letters, not less than one inch in length.

Milk from diseased cows prohibited. SEC. 10. That it shall not be lawful for any person or persons to sell or offer for sale, within the District of Columbia, milk taken from any cow less than fifteen days before or ten days after parturition, or from any cow which is known to be suffering from tuberculosis, splenic fever, anthrax, or any general or local disease which is liable to render the milk from said cow unwholesome.

Regulations for dairies. SEC. 11. That it shall be the duty of the health officer of the District of Columbia, under direction of the Commissioners of said District, to make and enforce regulations to secure proper water supply, drainage, ventilation, air space, floor space, and cleaning of all dairies and dairy farms within said District; to secure the isolation of cattle suffering from any contagious disease, and to carry into effect the provisions of this act.

Inspection. SEC. 12. That the health officer of the District of Columbia, or his duly appointed assistants, shall have the right to enter without previous notice, for the purpose of inspection, any dairy or dairy farm within said District.

Milk sampling. SEC. 13. That in all cases of sampling, in the District of Columbia, milk taken for analysis shall be taken, examined, and analyzed in the presence of at least two witnesses, one of whom may be the owner of the milk or his agent; and in all cases such sampling shall be made according to the Bab-

¹The regulations made by authority of this section are as follows:

SECTION 1. No building shall be used for stabling cows for dairy purposes which is not well lighted, ventilated, drained, and constructed.

SEC. 2. No building shall be used for stabling cows for dairy purposes which is not provided with a suitable floor, laid with proper grades and channels to immediately carry off all drainage; and if a public sewer abuts the premises upon which such building is situated, they shall be connected therewith whenever, in the opinion of the health officer, such sewer connection is necessary.

SEC. 3. No building shall be used for stabling cows for dairy purposes which is not provided with good and sufficient feeding troughs or boxes, and with a covered water-tight receptacle outside of the building for the reception of dung and other refuse.

SEC. 4. No water-closet, privy, cesspool, urinal, inhabited room, or workshop shall be located within any building or shed used for stabling cows for dairy purposes, or for the storage of milk or cream, nor shall any fowl, hog, horse, sheep, or goat be kept in any room used for such purposes.

SEC. 5. The space in buildings or sheds used for stabling cows shall not be less than 500 cubic feet for each cow, and the stalls therefor shall not be less than 4 feet in width.

SEC. 6. It shall be the duty of each person using any premises for keeping cows for dairy purposes to keep such premises thoroughly clean and in good repair, and well painted or white-washed at all times.

SEC. 7. It shall be the duty of each person using any premises for keeping cows for dairy purposes to cause the building in which cows are kept to be thoroughly cleaned, and remove all dung from the premises so as to prevent its accumulation in great quantities.

SEC. 8. It shall be the duty of any person having charge or control of any premises upon which cows are kept to notify the health officer, in writing, of the existence of any contagious or infectious disease among such cows, within twenty-four hours of the discovery thereof, and to thoroughly isolate any cow or cows affected or which may reasonably be believed to be infected, and to exercise such other precautions as may be directed, in writing, by the health officer.

SEC. 9. Any person using any premises for keeping cows for dairy purposes shall provide and use a sufficient number of receptacles made of nonabsorbent materials for the reception, storage, and delivery of milk, and shall cause them at all times to be cleaned and purified, and shall cause all milk to be removed without delay from the rooms in which the cows are kept.

SEC. 10. Every person keeping cows for the production of milk for sale shall cause every such cow to be cleaned every day and to be properly fed and watered.

SEC. 11. Every person using any premises for keeping cows shall cause the yard used in connection therewith to be provided with a proper receptacle for drinking water for each cow; none but fresh, clean water to be used in such receptacle.

SEC. 12. Any inclosure in which cows are kept shall be graded and drained so as to keep the surface reasonably dry and to prevent the accumulation of water therein, except as may be permitted for the purpose of supplying drinking water; no garbage, urine, fecal matter, or similar substances shall be placed or allowed to remain in such inclosure; and no open drain shall be allowed to run through it.

SEC. 13. These regulations shall apply to all premises upon which cow's milk is produced for sale.

SEC. 14. That any person violating any of these regulations shall, on conviction in the police court of said District, be punished by a fine of not less than \$5 nor more than \$10 for each and every offence, to be collected as other fines and penalties are collected.

cock method, to wit, dumping the milk from one can to another not less than twice before sampling.

Prosecutions. SEC. 14. That prosecutions under this act shall be in the police court of said District, on information signed by the attorney of the District or one of his assistants, and any person or persons violating any of the provisions of this act shall be deemed guilty of a misdemeanor, and shall, on conviction, be punished for the first offense by a fine of not less than five

Penalty. dollars nor more than twenty-five dollars, to be collected as other fines and penalties, or by imprisonment in the workhouse for a period of not more than thirty days, and for the second offense and each subsequent offense, by a fine of not less than fifty dollars nor more than one hundred dollars, or by imprisonment in the workhouse for ninety days, or by both such fine and imprisonment, in the discretion of the court, and if the person so convicted of a second or subsequent offense hold a permit under this act, the same shall be canceled and no permit shall be issued to said person for a period of six months: *Provided*, That any person or persons under this act shall have the privilege, when demanded, of a trial by jury as in other jury cases in the police court.

Laws repealed. SEC. 15. That all laws and parts of laws inconsistent with the foregoing be, and the same are hereby, repealed.

FORTY-FIFTH CONGRESS, Session III, Chapter 22.

AN ACT for the protection of dairymen, and to prevent deception in sales of butter and cheese in the District of Columbia. (Approved January 25, 1879.)

Imitation substances to be labeled. SECTION 1. That every person who shall manufacture for sale, or who shall offer or expose for sale, any article or substance in semblance of butter or cheese, not the legitimate product of the dairy, and not made exclusively of milk or cream, but into which the oil or fat of animals, not produced from milk, enters as a component part, or into which melted butter or any oil thereof has been introduced to take the place of cream, shall distinctly and durably stamp, brand, or mark upon every tub, firkin, box, or package of such article or substance the word "Oleomargarine" in plain Roman letters, not less than half an inch square, placed horizontally in proper order, thus:

OLEOMARGARINE.

Retail sales. And in case of retail sales of such article or substance in parcels the seller shall in all cases deliver therewith to the purchaser a written or printed label bearing the plainly written or printed word "Oleomargarine," in type or letters as aforesaid; and every sale of such article or substance not so stamped, branded, marked, or labeled shall be void, and no action shall be maintained for the price thereof.

Penalty. SEC. 2. That every person who shall sell or offer to sell, or have in his or her possession with intent to sell, contrary to the provisions of this act, any of the said article or substance required by the first section of this act to be stamped, marked, or labeled as therein stated, not so stamped, marked, or labeled, or in case of retail sale without delivery of a label required by section one of this act, shall, for each such offense, forfeit and pay a fine of one hundred dollars, to be recovered by indictment in any court of the District of Columbia of competent jurisdiction for the trial of misdemeanors, and the one-half of such fine when paid to go to the informer, and the residue to be paid into the treasury of the District of Columbia.

Proof of guilt. SEC. 3. That every person who shall sell, or offer or expose for sale, or who shall cause or procure to be sold, or offer or expose for sale, any article or substance required by the first section of this act to be marked, branded, stamped, or labeled, not so marked, branded, stamped, or labeled shall be guilty of a misdemeanor, and, on trial for such misdemeanor, proof of the sale or offer or exposal alleged shall be presumptive evidence of knowledge of the character of the article so sold or offered.

FIFTY-FIFTH CONGRESS, Session II, Chapter 25.

AN ACT relating to the adulteration of foods and drugs in the District of Columbia. (Approved February 17, 1898.)

Adulterated food prohibited. SECTION 1. That no person shall, within the District of Columbia, by himself or by his servant or agent, or as the servant or agent of any other person, sell, exchange, or deliver, or have in his cus-

tody or possession with the intent to sell or exchange, or expose or offer for sale or exchange, any article of food or drug which is adulterated within the meaning of this act.

Food defined. SEC. 2. That the term "drug," as used in this act, shall include all medicines for external or internal use, antiseptics, disinfectants, and cosmetics. The term "food," as used herein, shall include confectionery, condiments, and all articles used for food or drink by man, and if there be more than one quality of any article of food or drug known by the same name, the best quality thereof shall be furnished to the purchaser, unless he otherwise requests at the time of making such purchase, or unless he be notified at such time of the inferior quality of the article delivered.

SEC. 3. That an article shall be deemed to be adulterated within the meaning of this act—

(a) In the case of drugs:

* * * * *

Adulterated food defined. (b) In the case of food: First, if any substance or substances have been mixed with it so as to reduce or lower or injuriously affect its quality or strength; second, if an inferior or cheaper substance or substances have been substituted wholly or in part for it; third, if any valuable constituent has been wholly or in part abstracted from it; fourth, if it is an imitation of or is sold under the name of another article; fifth, if it consists wholly or in part of a deceased, decomposed, putrid, or rotten animal or vegetable substance, whether manufactured or not; sixth, if it is colored, coated, polished, or powdered whereby damage is concealed, or if it is made to appear better or of greater value than it really is; seventh, if it contains any added poisonous ingredient or any ingredient which may render it injurious to the health of a person consuming it; eighth, in the case of milk, if it contains less than three and one-half per centum of fat, less than nine per centum of solids not fat, and contains more than

Milk standard; cream standard; butter and cheese.

eighty-seven and one-half per centum of water; in the case of cream, if it contains less than twenty per centum of butter fat; ninth, in the case of butter or cheese, if it is not made exclusively from milk or cream, or both, with or without common salt; the butter, if it contains more than twelve per centum of water, more than five per centum of salt, and less than eighty-three per centum of fat. * * *

Exceptions. That an offense shall not be deemed to be committed under this section in the following cases, that is to say: First, where the order calls for an article of food or drug inferior to such standard, or where such difference is made known by being plainly written or printed on the package; second, where the article of food or drug is mixed with any matter or ingredient not injurious to health and not intended fraudulently to increase its bulk, weight, or measure or conceal its inferior quality, if at the time such article is delivered to the purchaser it is made known to him that such article of food or drug is so mixed.

Duty of health officer to enforce law. SEC. 4. That it shall be the duty of the health officer of the District of Columbia, under the direction of the Commissioners of said District, to adopt such measures as may be necessary to facilitate the enforcement hereof, and prepare rules and regulations with regard to the proper method of collecting and examining drugs and articles of food in said District.

Duty of health officer to investigate complaints. SEC. 5. That it shall be the duty of the health officer to investigate a complaint for a violation of any of the provisions of this act on the information of any person who lays before him satisfactory evidence by which to substantiate such complaint.

Samples to be furnished. SEC. 6. That every person offering for sale or delivering to any purchaser any drug or article of food included in the provisions of this act shall furnish to any analyst or other officer or agent of the health department, who shall apply to him for the purpose and shall tender him the value of the same, a sample sufficient for the purpose of analysis of any such drug or article of food which is in his possession.

Disposition of samples. SEC. 7. That in all cases where any drug or article of food shall be taken as a sample to be examined and analyzed the person making the analysis shall reserve a portion of the sample, which shall be sealed, for a period of thirty days from the time of taking such sample, and in case of a complaint the reserved portion alleged to be adulterated shall, upon application, be delivered to the defendant or his attorney.

Interfering with inspector. SEC. 8. That no person shall hinder, obstruct, or in any way interfere with any inspector, analyst, or other person of the health department in the performance of his duty in carrying out the provisions of this act.

Prosecutions; penalty. SEC. 9. That all prosecutions under this act shall be in the police court of said District, on information brought in the name of the District of Columbia, and on its behalf; and any person or persons violating any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than five dollars nor more than one hundred dollars.

Repealing clause. SEC. 10. That all acts and parts of acts inconsistent with this act be, and the same are hereby, repealed: *Provided*, That nothing in this act contained shall be construed as modifying or repealing any of the provisions of "An act defining butter, also imposing a tax upon and regulating the manufacture, sale, importation, and exportation of oleomargarine," approved August second, eighteen hundred and eighty-six, or of "An act defining cheese, and also imposing a tax upon and regulating the manufacture, sale, importation, and exportation of 'filled cheese,'" approved June sixth, eighteen hundred and ninety-six.

FLORIDA.

LAWS OF 1881, Chapter 3280.

AN ACT to prevent the selling as butter of oleomargarine or any spurious preparations purporting to be butter. (Approved February 17, 1881.)

Sale of spurious preparations as butter prohibited. SECTION 1. That any person or persons who shall knowingly and willfully sell or cause to be sold as butter any spurious preparation purporting to be butter, whether known as oleomargarine or by any other name, shall be deemed guilty of a misdemeanor, and upon conviction shall be fined in a sum not to exceed one hundred dollars, or be imprisoned in the county jail for a period of time not to exceed thirty days, or by both fine and imprisonment, at the discretion of the court.

Use in hotels, etc., must be made known. SEC. 2. Any keeper of any hotel or boarding house who shall knowingly and willfully, without giving notice to guests at the table, supply oleomargarine or other spurious preparation purporting to be butter, for the use of guests, shall be subject to the same penalty.

GEORGIA.

Acts of 1885, Part 1, Title 7, No. 207.

AN ACT to regulate the sale of milk, butter, and cheese, and to prescribe penalties for the unlawful sale or offering for sale of any watered or adulterated or unwholesome milk, and imitations or adulterations of butter and cheese. (Approved December 18, 1885.)

Sale of adulterated or impure milk prohibited. SECTION 1. That it shall not be lawful for any person, or corporation, or agent to sell, or expose for sale, or deliver for domestic use any unclean, impure, unwholesome, adulterated, or skimmed milk, or milk from which has been held back what is known as "strippings," or milk taken from an animal having disease, ulcers, or abscesses, or from an animal within less than fifteen days before or less than five

Sale of buttermilk and skimmed milk permitted. days after parturition: *Provided*, That this section shall not apply to the sale of buttermilk or to skimmed milk when sold as such.

Milk standard. SEC. 2. That for the purposes of this act milk which is proven by any reliable test or analysis to contain less than three and one-half per centum of butter fat, and eight and one-half per cent of other solids other than butter fat, shall be regarded as skimmed or partially skimmed milk.

Imitation butter and cheese defined. SEC. 3. That for the purposes of this act every article, substance, or compound, other than that produced from pure whole milk or cream from the same, made in the semblance of

butter or cheese, and designed to be used as a substitute for butter or cheese made from pure milk or cream from the same, is hereby declared to be imitation butter or imitation cheese, as the case may be: *Provided*, The use of salt, rennet, and harmless coloring matter for coloring the product of pure milk or cream shall not be construed to render such product an imitation.

Coloring imitation butter and cheese. SEC. 4. That no person shall coat, powder, or color with annatto or any coloring matter whatever any substance designed to be used as a substitute for butter or for cheese, whereby such substance or product shall be caused to resemble butter or cheese, the product of pure milk or cream.

Coloring of any fats, oils, etc. SEC. 5. That no person shall combine any animal fat or vegetable oil or other substance with butter or cheese, or combine therewith or with animal fat or with vegetable oil, or a combination of the two, or with either one, or with any substance whatever, any annatto or any other coloring matter for the purpose or with the effect of imparting thereto a yellow color, or any shade of yellow, so that such substance shall resemble genuine yellow butter or cheese, nor introduce any such coloring matter or any such substance into any of the ingredients of which such substitute may be composed: *Provided*, That nothing in this act shall be construed to prohibit the use of salt, rennet, or harmless coloring matter for coloring the products of pure milk or cream from the same.

Imitation butter and cheese allowed under restrictions. SEC. 6. That no person shall, by himself or employee or agent, produce or manufacture or sell, or keep for sale or offer for sale, any imitation butter or imitation cheese made or compounded in violation of this act, whether such imitation shall have been made or produced in this State or elsewhere: *Provided*, That this act shall not be construed to prohibit the manufacture and sale of imitation butter or imitation cheese under the regulations hereinafter provided, not manufactured or colored as herein prohibited.

Brand required. SEC. 7. That every person who lawfully manufactures any substance designed to be used as a substitute for butter or for cheese shall mark by branding, stamping, or stenciling upon the top and side of each tub, box, or other vessel in which such substitute shall be kept, or in which it shall be removed from the place where produced, in a clear and durable manner in the English language, the words "Substitute for butter," or "Substitute for cheese," as the case may be, in printed letters, in plain Roman type, each of which shall be not less than one inch in height and one-half inch in breadth.

Brands on all packages. SEC. 8. That no person shall have in his possession or control any substance designed to be used as a substitute for butter or for cheese, unless the tub, box, or other vessel containing the same shall be clearly and durably marked as provided in section 7 of this act: *Provided*, That this section shall not apply to a person who has such imitation butter or imitation cheese in his possession for the actual consumption of himself or family.

Information at time of sale. SEC. 9. That no person, by himself or agent or employee, shall sell or offer for sale any imitation butter or imitation cheese, under the pretense that the same is genuine butter or genuine cheese; and no person, his agent, or employee shall sell any imitation butter or imitation cheese, unless he shall notify the purchaser distinctly at the time of the sale that the same is imitation butter or imitation cheese, as the case may be, and shall deliver to the purchaser at the time of the sale a printed statement, in the English language, that the same is imitation butter or imitation cheese, and such statement shall also contain the name and address of producers of such imitation, and said statement shall be printed in black letters not smaller than 4-line pica, and shall contain no other words than the above prescribed.

Signs posted where imitation butter or cheese is used. SEC. 10. That no keeper of or proprietor of any bakery, hotel, boarding house, saloon, restaurant, lunch counter, or other place of public entertainment, or any employee or other person having charge thereof, or any person furnishing board for others than his own family, shall keep, use, or serve therein or elsewhere either as food for his guests, boarders, patrons, customers, or employees, or for cooking purposes, any imitation butter or imitation cheese, as defined in section 3 of this act, unless such keeper, proprietor, or other person in charge of such place of entertainment shall keep constantly posted in a most conspicuous place in the room or rooms, or other place or places where such imitations shall be served or sold, so that the same may be easily seen and read by any person in

such room or place, a white card not less than ten by fourteen inches in size, on which shall be printed, in the English language, in plain black Roman letters, not smaller than one inch in height and one-half inch in width, the words "Imitation butter used here," or "Imitation cheese used here," as the case may be, and said cards shall not contain any other words or impressions than the words above prescribed.

Penalty. SEC. 11. That a violation of any of the provisions of this act shall be punished as prescribed in section 4310 of the code of Georgia.

Prosecution. SEC. 12. That violations of any provisions of this act shall be proceeded against by any of the processes provided for misdemeanors, and may be tried by any court having jurisdiction of misdemeanors in this State.

Take effect. SEC. 13. That this act shall take effect from and after January the first, eighteen hundred and ninety-six.

Laws repealed. SEC. 14. That all laws in conflict with this act be, and the same are hereby, repealed.

IDAHO.

GENERAL LAWS, 1884-85, page 61.

AN ACT to prevent the sale of oleomargarine, butterine, mixtures imitating or adulterated butter. (Approved January 27, 1885.)

Oleomargarine, butterine, etc., must be branded, and not sold as butter. SECTION 1. Every person who sells or keeps for sale, or offers for sale, or otherwise disposes of any quantity of oleomargarine, butterine, mixture imitating butter, or adulterated butter, under the name of or under the pretense that the same is butter, or shall keep for sale or manufacture any quantity of oleomargarine, butterine, mixture imitating butter, or adulterated butter, without branding the same or the package in which it is contained, on the outside thereof, with the word oleomargarine, butterine, or adulterated butter, shall be deemed guilty of a misdemeanor, and on conviction thereof before a court of competent jurisdiction, shall be punished by imprisonment in the county jail for a term not less than fifty or more than two hundred days, or by a fine not less than fifty or more than three hundred dollars, or by both such fine and imprisonment.

In effect. SEC. 2. This act shall take effect and be in force from and after its passage.

REVISED STATUTES OF 1897.

Adulterated foods, etc. SEC. 6918. Every person who adulterates or dilutes any article of food, drink, drug, medicine, spirituous or malt liquor, or wine, or any article useful in compounding them, with a fraudulent intent to offer the same or to cause or permit it to be offered for sale as unadulterated or undiluted, and every person who fraudulently sells, or keeps, or offers for sale the same, as unadulterated or undiluted, is guilty of a misdemeanor.

ILLINOIS.

LAWS OF 1879, page 111. (Hurd's Revised Statutes, chapter 38, sections 9-9e.)

AN ACT to regulate the sale of milk, and to provide penalties for the adulteration thereof. (Approved May 29, 1879.)

Sale of adulterated milk. SECTION 1. That whoever shall, for the purpose of sale for human food, adulterate milk with water or any foreign substance, or whoever shall knowingly sell for human food, milk from which cream has been taken, without the purchaser being informed or knowing the fact, or whoever shall knowingly sell for human food, milk from which what is commonly called "strippings" has been withheld, without the purchaser thereof being informed or knowing the fact, or whoever shall knowingly sell for human food milk drawn from a diseased cow, knowing her to be so diseased as to render her milk unwholesome, or whoever shall knowingly sell for human food, milk so tainted or corrupted as to be

unwholesome, or whoever shall knowingly supply, or bring to be manufactured into any substance for human food, to any
Delivery of adulterated, diseased, etc., milk to cheese or butter factory or creamery, with-
 factories. out all interested therein knowing or being
 informed of the fact, milk which is adulterated with water or any foreign substance, or milk from which cream has been taken, or milk from which what is commonly called "strippings" has been withheld, or milk drawn from a diseased cow, knowing her to be so diseased as to injure her milk, or milk so tainted or corrupted
Adulteration of milk after delivery. as to be unwholesome, or whoever shall knowingly, with intent to defraud, take from milk after it has been delivered to a cheese factory, or butter factory or creamery, to be manufactured into any substance for human food, for or on account of the person supplying the milk or cream, or shall, with like intent, knowingly add any foreign substance to the milk or cream, whereby it, or the products thereof, shall become unwholesome for human food, shall be guilty of a misdemeanor, and for each and
Penalty. every such misdemeanor shall be fined not less than twenty-five nor more than one hundred dollars or confined in the county jail not exceeding six months or both, in the discretion of the court.

Care of milch cows. SEC. 2. Any person who shall adulterate milk, with the view of offering the same for sale or exchange, or shall keep cows for the production of milk for market, or for sale or exchange, in an unhealthy condition, or knowingly feed the same on food that produces impure, diseased, or unwholesome milk, shall be deemed guilty of a misdemeanor, and, on conviction,
Penalty. shall be punished by a fine of not less than fifty dollars nor more than two hundred dollars, for each and every offense.

Marks on cans and wagons. SEC. 3. Any person or persons who shall, in any of the cities of this State, engage in or carry on a retail business in the sale, exchange of, or any retail traffic in milk, shall have each and every can in which the milk is carried or exposed for sale or exchange, and the carriage or vehicle from which the same is vended, conspicuously marked with his, her, or their name or names, also indicating by said mark the locality from which said milk is obtained or produced, and for every neglect of such marking, the
Penalty. person or persons so neglecting shall be subject to the penalties expressed in section 2 of this act; but for every violation of this act, by so marking said cans, carriage, or vehicle, as to convey the idea that said milk is produced or procured from a different locality than it really is, the person or persons so offending shall be subject to a fine of one hundred dollars.

Cans of skimmed milk to be marked. SEC. 4. Any person who shall, in any of the cities in this State, offer for sale any milk from which the cream or any part thereof shall have been taken, shall offer for sale and sell the same as skimmed milk, and not otherwise, and shall have each can or vessel in which such milk is carried, or exposed for sale, plainly and conspicuously marked with the words "Skimmed milk." Any person violating this section shall be subject to a fine not exceeding fifty dollars for each and every violation.

Judgment; issuing capias. SEC. 5. Upon the rendition of judgment imposing a fine as provided in the foregoing sections, it shall be the duty of the justice of the peace or other court rendering said judgment, also to render a judgment for the costs, and forthwith to issue a *capias* or warrant of commitment against the body of the defendant, commanding that, unless the said fine and costs be forthwith paid, the defendant shall be committed to the jail of the county, and the constable or other officer to whose hands said *capias* or warrant shall come shall, in default of such payment, arrest the defendant and commit him to the jail of the county, there to remain, as provided by section 303 of "An act to revise the law in relation to criminal jurisprudence," in force July 1, 1874, unless such fine and costs shall sooner be paid.

Adulterated and unwholesome milk defined. SEC. 6. The addition of water or any foreign substance to milk or cream intended for sale, or exchange, is hereby declared an adulteration. Any milk that is obtained from cows fed on distillery waste, usually called "swills," or upon any substance in a state of putrefaction, is hereby declared to be impure and unwholesome. Nothing in this act shall be construed to prevent the addition of
Sugar in condensed milk. sugar in the manufacture of condensed or preserved milk.

Acts repealed. SEC. 7. Section nine of division one of an act entitled "An act to revise the law in relation to criminal jurisprudence" (approved March 27, 1874); and all other acts and parts of acts inconsistent herewith are hereby repealed.

LAWS OF 1883, page 54 (Revised Statutes, chapter 5, sections 20-32).

AN ACT to require operators of butter and cheese factories on the cooperative plan to give bonds, and to prescribe penalties for the violation thereof. (Approved June 18, 1883.)

Operators of cooperative factories must give bonds. SECTION 1. That it shall be unlawful for any person or persons, company or corporation, within this State to operate, carry on, or conduct the business of manufacturing butter or cheese on the cooperative or dividend plan until such person or persons, company or corporation, shall have filed with the circuit clerk or recorder of deeds of the county in which it is proposed to carry on such business a good and sufficient bond, to be approved by such circuit clerk or recorder of deeds, in the penal sum of six thousand dollars, with one or more good sureties, conditioned that such person or persons, company or corporation, proposing to carry on such business will, on or before the first day of each month, make, acknowledge, subscribe, and swear to a report in writing, showing the amount of products manufactured, the amount sold, the prices received therefor, and the dividends earned and declared for the third month preceding the month in which such report is made, and will file a copy of such report with the clerk of the town or precinct in which such factory is located, and will also keep publicly posted, in a conspicuous place in such factory, a copy of such report for the inspection of the patrons thereof, and that such dividends shall be promptly paid to the persons entitled thereto.

Bonds for protection of any creditor. SEC. 2. Such bond shall run to the people of the State of Illinois, and shall be for the benefit and protection of all patrons of such factory; and suit may be had thereon by any person or persons injured by a breach of the conditions thereof by an action of debt for the use of the person or persons interested for all damages sustained by them.

Bonds to be recorded. SEC. 3. Such bond shall be recorded by the circuit clerk or recorder with whom the same is filed, and all such reports so filed with any town or precinct clerk shall be preserved by him and held subject to the inspection of any person or persons interested.

Penalty. SEC. 4. Any person who shall willfully violate any provision of this act shall be liable to a fine of not less than two hundred dollars nor more than five hundred dollars, or imprisonment in the county jail for not less than thirty days nor more than six months, or both, in the discretion of the court.

LAWS OF 1879, page 11 (Revised Statutes, chapter 38, sections 33a-33c).

AN ACT to prevent frauds in the manufacture and sale of butter and cheese. (Approved May 31, 1879.)

Imitations must be sold under true name and branded. SECTION 1. That whoever manufactures, sells, or offers for sale, or causes the same to be done, any substance purporting to be butter or cheese, or having the semblance of butter or cheese, which substance is not made wholly from pure cream or pure milk, unless the same be manufactured under its true and appropriate name, and unless each package, roll, or parcel of such substance, and each vessel containing one or more packages of such substance, have distinctly and durably painted, stamped, or marked thereon the true and appropriate name of such substance, in ordinary bold-faced capital letters not less than five-lines pica, shall be punished as provided in section 3 of this act.

Label must be delivered with each sale. SEC. 2. Whoever shall sell any such substance as is mentioned in section 1 of this act to consumers, or cause the same to be done, without delivering with each package, roll, or parcel so sold, a label on which is plainly and legibly printed, in roman letters, the true and appropriate name of such substance, shall be punished as is provided in section 3 of this act.

Penalty. SEC. 3. Whoever knowingly violates section 1 or section 2 of this act shall be fined in any sum not less than ten nor more than three hundred dollars, or imprisoned in the county jail not less than ten nor more than ninety days, or both, in the discretion of the court: *Provided*, That nothing contained in this act shall be construed to prevent the use of skimmed milk, salt rennet, or harmless coloring matter, in the manufacture of butter and cheese.

LAWS OF 1881, page 74 (Revised Statutes, chapter 38, sections 97, 98).

AN ACT to prevent the adulteration of butter and cheese, or the sale or disposal of the same, or the manufacture or sale of any article as a substitute for butter or cheese, or any article to be used as butter and cheese. (Approved June 1, 1881.)

Substitutes of butter and cheese not to be sold as the genuine articles. SECTION 1. That whoever manufactures, out of any oleaginous substances, or any compound of the same other than that produced from unadulterated milk, or cream from the same, any article designed to take the place of butter or cheese produced from pure, unadulterated milk, or cream of the same, and shall sell, or offer for sale, the same as butter or cheese, or give to any person the same as an article of food, as butter or cheese, shall, on conviction thereof, be fined not less than twenty-five dollars nor more than two hundred dollars.

Acts repealed. SEC. 2. All acts or parts of acts inconsistent with this act are hereby repealed.

LAWS OF 1881, page 75 (Revised Statutes, chapter 38, sections 99-100).

AN ACT to prevent and punish the adulteration of articles of food, drink, and medicine, and the sale thereof when adulterated. (Approved June 1, 1881.)

Mixed or colored food not to be sold. SECTION 1. That no person shall mix, color, stain, or powder, or order or permit any other person in his or her employ, to mix, color, stain, or powder any article of food with any ingredient or material, so as to render the article injurious to health, or depreciate the value thereof, with intent that the same may be sold; and no person shall sell or offer for sale any such article so mixed, colored, stained, or powdered.

Compounds must be sold under true name; use of colors, etc. SEC. 3. No person shall mix, color, stain, or powder any article of food, drink, or medicine, or any article which enters into the composition of food, drink, or medicine, with any other ingredient or material, whether injurious to health or not, for the purpose of gain or profit, or sell, or offer the same for sale, or order or permit any other person to sell or offer for sale any article so mixed, colored, stained, or powdered, unless the same be so manufactured, used, or sold, or offered for sale under its true and appropriate name, and notice that the same is mixed or impure is marked, printed, or stamped upon each package, roll, parcel, or vessel containing the same, so as to be and remain at all times readily visible, or unless the person purchasing the same is fully informed by the seller of the true name and ingredients (if other than such as are known by the common name thereof) of such article of food, drink, or medicine, at the time of making sale thereof or offering to sell the same.

Mixtures of oleomargarine, etc., with butter and cheese to be marked. SEC. 4. No person shall mix oleomargarine, suine, butterine, beef fat, lard, or any other foreign substance, with any butter or cheese intended for human food, without distinctly marking, stamping, or labeling the article, or the package containing the same, with the true and appropriate name of such article, and the percentage in which such oleomargarine or suine enters into its composition; nor shall any person sell or offer for sale, or order or permit to be sold or offered for sale, any such article of food into the composition of which oleomargarine or suine has entered, without at the same time informing the buyer of the fact, and the proportions in which such oleomargarine, suine, or butterine, beef fat, lard, or any other foreign substance has entered into its composition: *Provided*, That nothing in this act shall be so construed as to prevent the use of harmless coloring matter in butter and cheese, or other articles of food.

Penalty. SEC. 5. Any person convicted of violating any provision of any of the foregoing sections of this act shall, for the first offense, be fined not less than twenty-five dollars nor more than two hundred; for the second offense he shall be fined not less than one hundred dollars nor more than two hundred dollars, or confined in the county jail not less than one month nor more than six months, or both, at the discretion of the court; and for the third and all subsequent offences he shall be fined not less than five hundred dollars nor more than two thousand dollars, and imprisoned in the penitentiary not less than one year nor more than five years.

Defense, ignorance of law. SEC. 6. No person shall be convicted under any of the foregoing sections of this act, if he shows to the satisfaction of the court or jury that he did not know that he was violating any of the provisions of this act, and that he could not, with reasonable diligence, have obtained the knowledge.

State's attorney to prosecute. SEC. 7. The State's attorneys of this State are charged with the enforcement of this act, and it is hereby made their duty to appear for the people, and to attend to the prosecution of all complaints under this act, in their respective counties, in all courts.

Repeal. SEC. 8. All acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

LAWs of 1897, page 3 (Revised Statutes, chapter 33, sections 30d-30n).

AN ACT to regulate the manufacture and sale of substitutes for butter. (Approved June 14, 1897).

Imitation butter defined. SECTION 1. That for the purpose of this act every article, substitute, or compound other than that which is produced from pure milk or cream therefrom, made in the semblance of butter and designed to be used as a substitute for butter made from pure milk or its cream, is hereby declared to be imitation butter: *Provided*, That the use of salt and harmless coloring matter for coloring the product of pure milk or cream shall not be construed to render such product an imitation.

Coloring imitation butter. SEC. 2. No person shall coat, powder, or color with annatto or any coloring matter whatever any substance designed as a substitute for butter, whereby such substitute or product so colored or compounded shall be made to resemble butter, the product of the dairy. No person

Coloring of any fats, oils, &c. shall combine any animal fat or vegetable oil or other substance with butter or combined therewith or with animal fat or vegetable oil, or combination of the two, or with either one, any other substance or substances, for the purpose or with the effect of imparting thereto a yellow color or any shade of yellow so that such substitute shall resemble yellow or any shade of genuine yellow butter, nor introduce any such coloring matter or such substance or substances into any of the articles of which the same is composed: *Provided*, Nothing in this act shall be construed to prohibit the use of salt, rennet, and harmless coloring matter for coloring the products of pure milk, or cream from the same.

Imitation butter allowed under restrictions. No person shall, by himself, his agents, or employees, produce or manufacture any substance in imitation or semblance of natural butter, nor sell, nor keep for sale, nor offer for sale any imitation butter, made or manufactured, compounded or produced in violation of this section, whether such imitation butter shall be made or produced in this State or elsewhere. This section shall not be construed to prohibit the manufacture and sale, under the regulations hereinafter provided, of substances designed to be used as a substitute for butter and not manufactured or colored as herein prohibited.

Brand required. SEC. 3. Every person who lawfully manufactures any substance designed to be used as a substitute for butter shall mark by branding, stamping, or stenciling upon the top and side of each tub, firkin, box, or other package in which said article shall be kept and in which it shall be removed from the place where it is produced, in a clean and durable manner, in the English language, the word "Oleomargarine," or the word "Butterine," or the words "Substitute for butter," or the words "Imitation butter," in printed letters in plain, Roman type, each of which shall not be less than three-quarters of an inch in length.

Notification at sale. SEC. 4. It shall be unlawful to sell or offer for sale any imitation butter without informing the purchaser thereof, or the person or persons to whom the same is offered for sale, that the substance sold or offered for sale is imitation butter.

Brands on packages to be shipped. SEC. 5. No person, by himself for another, shall ship, consign, or forward by any common carrier, whether public or private, any substance designed to be used as a substitute for butter, unless it shall be marked or branded on each tub, box, firkin, jar, or other package containing the same, as provided in this act, and unless it be consigned

by the carrier and receipted for by its true name: *Provided*, That this act shall not apply to any goods in transit between foreign States across the State of Illinois.

Brands on all packages. SEC. 6. No person shall have in his possession, or under his control, any substance designed to be used as a substitute for butter, unless the tub, firkin, jar, box, or other package containing the same be clearly and durably marked, as provided in this act: *Provided*, That this section shall not be deemed to apply to persons who have the same in their possession for the actual consumption of themselves or their families. Every person who shall have in his possession or control any imitation butter for the purpose of selling the same, which is not marked as required by the provisions of this act, shall be presumed to have known during the time of such possession or control the true character and name as fixed by this act of such product.

Possession a misdemeanor. SEC. 7. Whoever shall have possession or control of any imitation butter or any substance designed to be used as a substitute for butter, contrary to the provisions of this act, for the purpose of selling the same, or offering the same for sale, shall be held to have possession of such property with intent to use it in violation of this act.

Contracts void. SEC. 8. No action shall be maintained on account of any sale or contract made in violation of or with the intent to violate this act by or through any person who was knowingly a party to such wrongful sale or contract.

Removal of marks. SEC. 9. Whoever shall deface, erase, or remove any mark provided by this act, with intent to mislead, deceive, or to violate any of the provisions of this act, shall be guilty of a misdemeanor.

Penalty. SEC. 10. Whoever shall violate any of the provisions of this act shall be punished by a fine of not less than fifty nor more than two hundred dollars, or by imprisonment in the county jail not to exceed sixty days, for each offense, or by both fine and imprisonment, in the discretion of the court, or the fine alone may be sued for and recovered before any justice of the peace in the county where the offense shall be committed, at the instance of any person. in the name of the people of the State of Illinois as plaintiff.

Prosecution. SEC. 11. It is hereby made the duty of the State's attorney of each county in this State to prosecute all violations of this act upon complaint of any person, and there shall be taxed as his fees in the case the sum of ten dollars, which shall be taxed as costs in the case.

LAW OF 1885, page 207 (Revised Statutes, chapter 38, sections 104a-104c).

AN ACT to protect the public from imposition in relation to canned or preserved food.
(Approved June 27, 1885.)

Articles to be marked to indicate grade. SECTION 1. That it shall hereafter be unlawful in this State for any packer or dealer in preserved or canned fruits and vegetables or other articles of food to offer such canned articles for sale after January 1, 1886, with the exception of goods brought from foreign countries, or packed prior to the passage of this act, unless such articles bear a mark to indicate the grade or quality, together with the name and address of such firm, person, or corporation that pack the same or dealer who sells the same. The firm, person, or corporation labeling such goods shall be considered the packer or packers.

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False stamp or label. SEC. 3. Any person, firm, or corporation, who shall falsely stamp or label such cans or jars containing preserved fruit or food of any kind, or knowingly permit such false stamping or labeling, and any person, firm, or corporation who shall violate any of the provisions of this act shall be deemed guilty of a misdemeanor, and punished with a fine of not less than fifty dollars; in the case of vendors, and in the case of manufacturers and those falsely or fraudulently stamping or labeling such cans or jars, a fine of not less than five hundred dollars nor more than one thousand dollars, and it shall be the duty of any board of health in this State cognizant of any violation of this act to prosecute any person, firm, or corporation which it has reason to believe has violated any of the provisions of this act, and after deducting the costs of the trial and conviction, to retain for the use of such board the balance of the fine or fines recovered.

INDIANA.

HORNER'S REVISED STATUTES, 1897.¹

Sale of adulterated and impure milk. 2071. Whoever shall knowingly sell to any person or persons, or sells or delivers or brings to be manufactured to any cheese or butter manufactory in this State, any milk diluted with water or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as "skimmed milk," or shall keep back any part of the milk known as "strippings" with intent to defraud, or shall knowingly sell milk, the product of a sick or diseased or injured animal or animals, or any milk produced from any cow fed upon the refuse of any distillery or brewery, or upon any substance deleterious to the quality of the milk, or shall knowingly use any poisonous or any deleterious material in the manufacture of any impure butter and cheese. cheese or butter, or shall knowingly sell or offer to sell any cheese or butter in the manufacture of which any poisonous or deleterious substance has been used, shall be fined not more than five hundred dollars Penalty. nor less than fifty dollars.

Oleomargarine to be labeled. 2071a. Whoever sells or has in his possession with the intent to sell, or expose for sale, or whoever keeps on any table at any hotel or at any public or private boarding house, any butter other than that made from pure milk without first labeling the same in large letters *Oleomargarine* shall be deemed guilty of a misdemeanor, and on conviction thereof Penalty. shall be fined not more than fifty dollars nor less than ten dollars.

IOWA.²

CODE OF 1897, Title 12, Chapter 18.

Dairy commissioner, term, etc. SECTION 2515. On or before the first day of April of each even-numbered year the governor shall appoint a dairy commissioner, who shall have a practical knowledge of and experience in the manufacture of dairy products, and hold his office for two years from the first day of May following his appointment, and until his successor is appointed and qualified, subject to removal by the governor for inefficiency, neglect or violation of duty. He shall give bond in the sum of ten thousand dollars, conditioned for the faithful performance of his duties, with sureties, to be approved by and filed with the secretary of state. He shall keep on hand a supply of standard test tubes or bottles and milk measures or pipettes adapted for use by **Accurate test apparatus.** each milk-testing machine, the manufacturers or dealers of which have filed with the dairy commissioner a certificate from the director of the Iowa agricultural experiment station, which shall certify that said milk-testing machine, when properly and correctly operated, will produce accurate measurements of butter fat, and furnish to any person or corporation desiring the same for testing milk one such tube or bottle, and such milk measure or pipette for each factory, of the kind adapted for the machine operated therein, upon request therefor, certifying it to be accurate, reliable, and standard, placing thereon the letters "D. C." as a permanent mark; the tubes or bottles and pipettes to be furnished at the actual cost thereof. He shall have and keep an **Office, records, etc.** office in the capitol, and preserve therein all correspondence, documents, records, and property of the State pertaining thereto, and may, when **Clerk.** necessary, employ a clerk at an expense of not more than seventy-five dollars per month. During his term of office he shall hold no other official position nor any professorship in any State educational institution, and on or before **Annual report.** the first day of November shall make annual report to the governor, which shall contain a detailed account of all his doings as commissioner, and the receipts and disbursements of his office since the preceding report,

¹ 271=Laws 1881, chapter 37, section 162. 2071a=Laws 1883, chapter 42, section 1.² Sec. 2515=25 General Assembly, chapter 47; 24 G. A., ch. 50, sec. 6; 23 G. A., ch. 52, sec. 5; 22 G. A., ch. 98, sec. 1; 21 G. A., ch. 52, secs. 11-14. 2516=25 G. A., ch. 46, secs. 2, 5; 21 G. A., ch. 52, secs. 1, 3; 19 G. A., ch. 170, sec. 4. 2517=25 G. A., ch. 46, secs. 4, 7, 8; 25 G. A., ch. 45, sec. 1; 21 G. A., ch. 52, secs. 2, 5, 6, 9. 2518=25 G. A., ch. 46, sec. 3. 2519=25 G. A., ch. 40, sec. 6; 21 G. A., ch. 52, secs. 4, 8. 2520=21 G. A., ch. 52, sec. 7. 2521=25 G. A., ch. 46, sec. 10; 21 G. A., ch. 52, sec. 15. 2523=25 G. A., ch. 47, sec. 1. 2524=24 G. A., ch. 50, secs. 4, 5. 2525=24 G. A., ch. 50, sec. 7. 2526=24 G. A., ch. 50, sec. 8. 2527=25 G. A., ch. 46, sec. 5; 21 G. A., ch. 52, sec. 10. 2528=21 G. A., ch. 52, sec. 12. 4999=24 G. A., ch. 50, sec. 1; 19 G. A., ch. 170, sec. 4; code of 1878, sec. 4042. 4990=24 G. A., ch. 50, sec. 2. 4991=24 G. A., ch. 50, sec. 3.

with such facts and statistics in regard to the production, manufacture, and sale of dairy products, with such suggestions as he may regard of public importance connected therewith. In the conduct of his office, he shall have power to issue subpoenas for witnesses, enforce their attendance, and examine them under oath, by him to be administered, such witnesses to be allowed fees as in justices' courts, to be paid by the commissioner as part of the expenses of his office, and do such other acts and things as are necessary and proper in the enforcement of the provisions of this chapter.

Imitation butter and cheese defined. SEC. 2516. Every article, substitute, or compound, save that produced from pure milk or cream from milk of cows, made in the semblance of or designed to be used for and in the place of butter, is imitation butter; and every article, substitute, or compound, save that produced from pure milk or cream from milk of cows, made in the semblance of or designed to be used for and in the place of cheese, is imitation cheese. No one shall manufacture, have in his possession, offer to sell or sell, solicit or take orders for delivery, ship, consign, or forward by any common carrier, public or private, and no common carrier shall knowingly receive or transport any such imitation butter or cheese, except in the manner and subject to the regulations in this chapter provided.

Regulations as to imitations. SEC. 2517. A substitute for butter and cheese, not having a yellow color nor colored in imitation of butter and cheese as prohibited in the next section may be manufactured, kept in possession, offered for sale, sold, shipped, consigned, or forwarded by common carriers, public or private, if each tub, firkin, box, or other package in which the same is kept, offered for sale, sold, shipped, consigned, or forwarded shall have branded, stamped, or marked on the side or top thereof in the English language, in a durable manner, the words, "Substitute for butter" or "Substitute for cheese," as the case may be, the letters of the words to be not less than one inch in length by one-half inch in width. The defacing, erasure, canceling, or removal of this brand or mark, with intent to mislead, deceive, or violate any provision of this chapter, is prohibited. Such substitute for butter or cheese may be kept, used, or served as a food or for cooking in hotels, restaurants, lunch counters, boarding houses, or other places of public entertainment, only in case the proprietor or person in charge of such place shall display and keep constantly posted a card opposite each table or other place where the guests or others are served with the same, which card shall be white, at least ten by fourteen inches in size, with the words, "Substitute for butter used here" or "Substitute for cheese used here," as the case may be, printed in black Roman letters of the same size as herein required to be placed upon the tubs, firkins, boxes, or other package in which substitute for butter or cheese is kept, and no other words or figures shall be printed thereon. No substitute for butter or cheese shall be offered for sale in the manufacturer's original package under the name of or for true butter or cheese made from the milk or cream of cows, nor shall any substitute for butter or cheese be offered for sale or sold unless the purchaser at the time was informed thereof, and, in addition, furnished with a printed statement in the English language in prominent type that the substance sold is such substitute, and giving the name and place of business of the maker. Nothing herein contained, however, shall be so construed as to prohibit the transportation of imitation butter or cheese through and across the State.

Coloring substitutes. SEC. 2518. No one shall color with any matter whatever any substance intended as a substitute for butter or cheese so as to cause it to resemble true dairy products, or combine any animal fat, vegetable oil, or other substance with butter or cheese, or combine with any substance whatever intended as a substitute for butter or cheese anything of any kind or nature for the purpose or with the effect of imparting to the compound the color of yellow butter or cheese, the product of the milk or cream from cows, or use, solicit orders for delivery, keep for sale or sell any such substance so colored and disguised as a substitute for butter or cheese; but nothing in this chapter shall be construed to prohibit the use of salt, rennet, or harmless coloring matter in making butter or cheese from such milk or cream.

Possession of substitutes. SEC. 2519. No one shall have in his possession or under his control, except for the actual consumption of himself or family, any substance designed as a substitute for butter or cheese, unless the tub,

firkin, box, or package holding the same is branded or marked as in this chapter required. Any person having in his possession or under his control such substance not so branded or marked shall be presumed to know its true character and name.

Contracts invalid. SEC. 2520. No action shall be maintained in any of the courts of the State upon any contract or sale made in violation of or with the intent to violate any provision of this chapter by one who was knowingly a party thereto.

Warrants. SEC. 2521. Whoever shall have in possession or control any imitation butter or cheese, or any substance designed to be used as a substitute for butter or cheese contrary to the provisions of this chapter, shall be held to have possession of property with intent to use it as a means of committing a public offense, and all the provisions of the chapter relating to search warrants and proceedings thereon shall apply, except the officer serving the warrant, in addition to his duties as therein required, shall deliver to the dairy commissioner, or to a person by him authorized in writing to receive the same, a perfect sample of each article seized by virtue of such warrant, for the purpose of having the same analyzed, and forthwith return to the person from whom it was taken the remainder of each article seized. If any sample is found to be imitation butter or cheese, or substance designed to be used as a substitute for butter or cheese, it shall be returned to and retained by the magistrate for the purposes contemplated in said chapter on "Search warrants and proceedings thereon," but if any sample be found not imitation butter or cheese, or a substance designed to be used as a substitute therefor, the value of the same shall be paid by the dairy commissioner as a part of the expenses of his office, to the person from whom it was taken.

Care of dairy premises. SEC. 2522. Every city milk dealer, or every person furnishing milk or cream to such dealer, or the employee of such milk dealer, and every person or corporation, or the employee of such person or corporation, who operates a creamery, cheese, or condensed-milk factory, or reworks or packs butter, shall maintain his premises and utensils in a clean and hygienic condition, and shall make, upon blanks furnished by the dairy commissioner, such reports and statistics as may be required for the purpose of compiling statistics authorized by this chapter, and such dealer, owner, operator, or business manager shall make such returns and reports in the manner and in the time prescribed by the commissioner, and certify to the correctness thereof.

Milk tests. SEC. 2523. Any person or corporation, or the employee of such person or corporation, who operates a creamery or cheese or condensed-milk factory, and uses a chemical milk test to determine the quantity of butter fat in milk purchased, used, or received, shall so use only such tests as shall be clear oil, free from any foreign substance, and produce correct measurements of butter fat, and every such person or corporation using a milk test shall procure from the dairy commissioner for each factory so operated one standard tube or standard bottle, bottle, and one standard measure or pipette, for testing milk, certified and marked by him as in this chapter provided, which shall be kept for inspection by the patrons and used by such person or corporation in testing or verifying test tubes or bottles and milk measures or pipettes used. In any action arising between any such operator and patron, the burden of establishing the use of reliable tests and the results therefrom, equivalent to the standard herein provided, shall be upon the operator.

Agents in cities. SEC. 2524. The commissioner may appoint agents in any city having over ten thousand inhabitants to collect from each dealer, not more than four times each month, samples of milk offered for sale therein. The agent shall make an accurate test of each sample received by him, and keep a true record thereof, with the name and location of the person from whom it was obtained, and report his work in detail to the commissioner, the compensation therefor not to exceed three dollars for each day actually employed therein.

Permit for selling milk. SEC. 2525. Any person or corporation who shall sell milk or cream from a wagon, depot, or store, or sell or deliver milk or cream to a hotel or restaurant or boarding house, or any public place in any such city, shall be considered a city milk dealer. No such city milk dealer shall sell milk or cream from a wagon, depot, or store in any such city without a written permit from the commissioner for each wagon, depot, or store operated by him,

for which he shall pay annually one dollar. All permits shall expire on the fourth day of July of each year, and no permit shall be issued for less than one dollar.

Powers of commissioner. SEC. 2526. He or his agent may open any can or vessel containing milk or cream offered for sale in such city, and inspect its contents and take samples therefrom for testing or analysis. And any city milk dealer, or employee of such milk dealer, or any other person who shall resist or interfere with the commissioner or his agent in the performance of his duties in executing any of the requirements of this chapter shall be guilty of a misdemeanor and punished as provided in this chapter.

Penalties. SEC. 2527. Whoever shall violate any provision of this chapter shall be punished by a fine not exceeding five hundred dollars, or by imprisonment in the county jail not exceeding six months, or by both such fine and imprisonment, at the discretion of the court.

Expenses, salary, etc. SEC. 2528. The commissioner shall be allowed necessary postage, stationery, and office supplies, and shall receive an annual salary of fifteen hundred dollars and necessary expenses, which shall not exceed three thousand dollars per year; such expenses to be itemized, verified by him, and, when examined and approved by the executive council, to be paid upon a warrant of the State auditor drawn upon the State treasurer. The salary of the clerk shall be paid in the same manner.

Title 24, Chapter 10.

Sale of impure milk. SEC. 4989. If any person shall sell, exchange, or expose for sale or exchange, or deliver or bring to another, for domestic or potable use, or to be converted into any product of human food, any unclean, impure, unhealthy, adulterated, unwholesome, or skimmed milk, or milk from which has been held back what is commonly known as strippings, or milk taken from an animal having disease, sickness, ulcers, abscess, or running sore, or which has been taken from an animal within fifteen days before or five days after parturition; or if any person, having cows for the purpose of producing milk

Care of cows. or cream for sale, shall stable them in an unhealthy place or crowded manner, or shall knowingly feed them food which produces impure, unwholesome milk, or shall feed them distilled glucose or brewery waste in any state of fermentation, or upon any substance in a state of putrefaction or rotteness or of an unhealthy nature, or shall sell or offer for sale cream which has been taken from milk the sale of which has been prohibited, or who shall sell or offer for sale, as cream, an article which shall contain less than the amount of butter fat as prescribed in this chapter; or if any person shall sell or offer for sale any cheese manufactured from skimmed milk, or from milk that is partly skimmed, without the same being plainly branded, stamped, or marked on the side

Skimmed-milk cheese. or top of both cheese and package, in a durable manner, in the English language, the words "skimmed-milk cheese," the letters of the words to

Penalty. be not less than one inch in height and one-half inch in width, he shall be fined not less than twenty-five nor more than one hundred dollars, and be liable for double damages to the person or persons upon whom such frauds shall be committed; but the provisions of this section shall not apply to skimmed milk when sold as such and in the manner and subject to the regulations prescribed in this chapter.

Adulteration defined. SEC. 4990. For the purposes of this chapter, the addition of water or any other substance or thing to whole milk or skimmed milk or partially skimmed milk is hereby declared an adulteration, and milk which is obtained from animals fed upon waste as defined in this chapter, or upon any substance of an unhealthy nature, is hereby declared to be impure and unwholesome, and milk which is proved by any reliable method of test or analysis to contain less than twelve and one-half per cent of milk solids to the

Milk standard. hundred pounds of milk, or than three pounds of butter fat to one hundred pounds of milk, shall be regarded as skimmed or partially skimmed milk, and every article not containing fifteen per cent or more of butter fat shall not be regarded as cream.

Enforcement. SEC. 4991. It is hereby made the duty of the dairy commissioner to enforce the provisions of the two preceding sections.

KANSAS.

GENERAL STATUTES, 1897, Volume 2.¹

Adulterated or tainted milk not to be delivered to cheese factories. SECTION 322. Whoever shall knowingly sell, supply, or bring to be manufactured to any cheese manufactory in this State any milk diluted with water or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as skimmed milk; or whoever shall keep back any part of the milk known as strippings; or whoever shall knowingly bring or supply milk to any cheese manufactory that is tainted or partly sour from want of proper care in keeping pails, strainers, or any vessel in which said milk is kept clean and sweet, after being notified of such taint or carelessness; or any cheese manufacturer who shall knowingly use, or direct any of his employees to use for his or their individual benefit, any cream from the milk brought to said cheese or butter manufacturers without the consent of all the owners thereof, shall, for each and every offense, forfeit and pay a sum not less than twenty-five dollars nor more than one hundred dollars, with costs, to be recovered in a criminal action.

Adulterated or diseased milk not to be delivered to butter or cheese factory. SEC. 323. Whosoever shall knowingly sell to any person or persons, or sell, deliver, or bring to be manufactured to any cheese or butter manufactory in this State any milk diluted with water or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as skimmed milk, or shall keep back any part of milk known as strippings, with intent to defraud, or shall knowingly sell milk the product of a diseased animal or animals, or shall knowingly use any poisonous or deleterious material in the manufacture of cheese or butter, shall, upon conviction thereof, be fined in a sum not less than twenty-five dollars nor more than one hundred dollars, and [shall be] liable in double the amount of damages to the person or persons, firm, association, or corporation upon whom such fraud shall be committed.

Sale of diseased provisions. SEC. 324. If any person shall knowingly sell any kind of diseased, corrupt, or unwholesome provisions, whether for meat or drink, without making the same fully known to the buyer, he shall be punished by imprisonment in the county jail not more than six months or by fine not exceeding one hundred dollars.

Adulteration of food or drink. SEC. 325. If any person shall fraudulently adulterate, for the purpose of sale, any substance intended for food, or any wine, spirit, malt liquor, or other liquor intended for drinking, with any substance injurious to health, he shall be punished by imprisonment in the county jail not more than one year or by fine not exceeding three hundred dollars; and the article so adulterated shall be forfeited and destroyed.

Adulterated articles prohibited. SEC. 327. No person shall within this State manufacture for sale, offer for sale, or sell any drug or article of food which is adulterated within the meaning of this act.

Food defined. SEC. 328. * * * The term "food" as used herein shall include all articles used for food or drink by man, whether simple, mixed, or compound.

"Adulterated" defined. SEC. 329. An article shall be deemed to be adulterated within the meaning of this act, * * *

In case of food: First. If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength, or purity. Second. If any inferior or cheaper substance or substances have been substituted wholly or in part for it. Third. If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it. Fourth. If it is an imitation of or is sold under the name of another article. Fifth. If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted, or rotten animal or vegetable substance or article, whether manufactured or not, or in the case of milk, if it is the produce of a diseased animal. Sixth. If it is colored, coated, polished, or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is. Seventh. If it contains any added substance or ingredient which is poisonous or injurious to

¹Section 322. Laws, 1871, chapter 57, section 1. Section 323. Laws, 1874, chapter 83, section 1. Sections 324 and 325. General Statutes, 1888, chapter 31, sections 276, 277. Sections 327-331. Laws, 1889, chapter 29.

health, or any deleterious substance not a necessary ingredient in its manufacture: *Provided*, That the provisions of this act shall not apply to Exceptions. mixtures or compounds recognized as ordinary articles of food, if the same be distinctly labeled as mixtures or compounds, and are not injurious to health, and contain no ingredient not necessary to the preparation of a genuine article of such mixtures or compounds, and from which no necessary ingredient in its preparation is eliminated.

Samples to be furnished. SEC. 330. Every person manufacturing, offering, or exposing for sale, or delivering to a purchaser any drug or article included in the provisions of this act shall furnish to any person interested or demanding the same who shall apply to him for the purpose, and shall tender him the value of the same, a sample sufficient for analysis of any such drug or article of food which is in his possession.

Penalty. SEC. 331. Whoever refuses to comply upon demand with the requirements of section four [the next preceding section], or whoever violates any of the provisions of this act, shall be guilty of a misdemeanor, and upon conviction shall be fined not exceeding one hundred nor less than twenty-five dollars, or imprisonment not exceeding one hundred days nor less than thirty days, or both. And any person found guilty of manufacturing, offering for sale, or selling any adulterated article of food or drug under the provisions of this act shall be adjudged to pay, in addition to the penalties hereinbefore provided for, all necessary costs and expenses incurred in inspecting and analyzing such adulterated articles which such person may have been guilty of manufacturing, selling, or offering for sale.

KENTUCKY.

ACTS OF 1891, 1892, and 1893, Chapter 182. (Approved April 10, 1893.)

Adulterated, skimmed, and impure milk. SECTION 144. Whoever shall knowingly sell, or cause to be sold, to any person in this State milk diluted with water, or in any way adulterated, or milk from which any cream has been taken, or sell milk, commonly known as "skimmed milk," with intent to defraud, or shall knowingly sell any milk the product of a diseased animal, or from animals fed upon "still slop," "brewers' slop," or "brewers' grains," or shall knowingly use any poisonous or deleterious material or milk from animals diseased or fed as aforesaid, in the manufacture of butter or cheese, shall be fined in any sum not less than twenty-five nor more than two hundred dollars.

False brands prohibited. SEC. 151. If any person use a false brand on anything sold, or to be sold, or offered for sale, with intent to deceive purchasers, he shall be fined not less than two hundred dollars for each offense.

ACTS OF 1898, Chapter 52.

AN ACT regulating the manufacture and sale of food.

Manufacture or sale of adulterated food unlawful. SECTION 1. It shall be unlawful for any person, persons, or corporation within this State to manufacture for sale, or expose for sale, or have in his or their possession for sale, or to sell any article of food which is adulterated or misbranded within the meaning of this act.

Food defined. SEC. 2. The term "food," as used in this act, shall include every article used for food or drink by man, horses, or cattle, except spirituous, vinous, and malt liquors.

"Misbranded" defined. The term "misbranded," as used in this act, shall include every article of food, and every article which enters into the composition of food, the package or label of which shall bear any statement purporting to name any ingredient or substance as not being contained in such article, which statement shall be untrue in any particular, or any statement purporting to name the substance or substances of which such article is made, which statement shall not give fully the names of all substances contained in such articles in any measurable quantity.

Adulterated food defined. SEC. 3. For the purpose of this act, an article shall be deemed adulterated: First, if any substance or substances be mixed or packed with it so as to reduce or lower or injuriously effect its

quality or strength. Second,¹ if any inferior substance or substances be substituted wholly or in part for the article. Fourth, if it be an imitation or sold under the name of another article: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine, butterine, or kindred compounds in a separate and distinct form, and in such manner as will advise the customer of its real character, free from coloration or ingredient that causes it to look like butter. Fifth, if it is colored, coated, polished, or powdered whereby damage is concealed, or if it is made to appear better or of greater value than it is. Sixth, if it contains poisonous ingredients which may render such article injurious to the health of a party consuming it, or if it contains any antiseptic or preservative not evident or not known to the purchaser or consumer. Seventh, if it consist in whole or in part of a diseased, filthy, decomposed, or putrid substance, either animal or vegetable, unfit for food, whether manufactured or not, or if it is in any part the product of a diseased animal, or if any animal that has died otherwise than by slaughter.

Experiment station to make analyses. SEC. 4. The experiment station of the Agricultural and Mechanical College hereby designated as the "Kentucky Agricultural Experiment Station" shall make analysis of food products on sale in Kentucky, suspected of being adulterated, at such times and places and at such extent as the director thereof may determine. And the director of the said Kentucky Agricultural Experiment Station may appoint such agent or agents as he deems necessary, who shall have free access at all reasonable hours, for the purpose of examining into any place wherein it is suspected any article of food adulterated with any deleterious or foreign ingredient or ingredients exists, and such agent or agents, upon tendering the market price of said article, may take from any person, firm, or corporation samples of any article suspected of being adulterated as aforesaid, and said station may adopt or fix standards of purity, quality, or strength, when such standards are not specified or fixed by statute.

Reporting adulteration. SEC. 5. Whenever said station shall find by its analysis that adulterated food products have been on sale in the State it shall forthwith transmit the facts so found to a grand juror or prosecuting attorney of the district in which such adulterated food product was found.

Report to governor. SEC. 6. Said station shall make an annual report to the governor upon adulterated food products, in addition to the reports required by law, which shall not exceed one hundred and fifty pages, and said report may be included in the report which said station is already authorized by law to make, and such annual reports shall be submitted to the general assembly at its regular session.

Penalty for adulterating food. SEC. 7. Any person, who either by himself, his agent, or attorney, with the intent that the same may be sold as adulterated or misbranded, adulterates or misbrands any food as defined in this act, for man or horses or cattle, or knowing that the same has been adulterated or misbranded, offers for sale or sells the same as unadulterated or truly branded, or without disclosing or informing the purchaser that the same has been adulterated or misbranded, shall be fined not more than five hundred dollars or imprisoned not more than one year.

Payment for making analyses. SEC. 8. The said Kentucky Agricultural Experiment Station shall receive for taking samples within the provisions of this act and for analysis of the same only actual traveling expenses and five dollars for each sample taken and analyzed, to be paid by the Commonwealth of Kentucky upon warrant of auditor, as other claims, but recovered of the owner of such article of food if declared upon inspection to be found adulterated or misbranded within the meaning of this act. The expenses of above inspection shall in no year exceed twenty-five hundred dollars.

Disposition of fines. SEC. 9. All fines recovered under this act shall be kept as a separate fund to pay necessary expenses in maintaining same.

No action for sales. SEC. 10. No civil action shall be maintained in any court in this State on account of any sale or other contract made in violation of this act.

Repealing clause. SEC. 11. All acts and parts of acts inconsistent herewith are hereby repealed.

¹ No third item in original.

LOUISIANA.

ACTS OF 1886, No. 81.

AN ACT to prohibit the sale in this State of oleomargarine, butterine, or other substitutes as butter, and to provide a penalty for the violation of the same. (Approved July 8, 1886.)

Substances prohibited. SECTION 1. That the sale of all substances, such as oleomargarine, butterine, bogus butter, or other material, either separately or in combination with any substances other than the product of the cow, as butter, is hereby prohibited.

Penalty. SEC. 2. That any merchant, grocer, or other person doing business in this State, who shall barter, sell, handle, or give away any of the substances mentioned in the first section of this act, except when so labeled as unmistakably to indicate their true composition, shall be guilty of a violation of the first section of this act, and, on conviction of the same before any court of competent jurisdiction, shall be punished by fine or imprisonment, or both, at the discretion of the court.

Repeal. SEC. 3. That all laws or parts of laws in conflict with this act are hereby repealed.

MAINE.

REVISED STATUTES OF 1888, Chapter 38.¹

Inspectors of milk. SECTION 44 (as amended by chapter 255, laws of 1893). The municipal officers of cities and towns containing not less than three thousand inhabitants shall annually appoint, and the municipal officers of all other towns shall, on application of ten voters therein, annually appoint one or more persons to be inspectors of milk, who shall, before entering upon their duties, be sworn, and give notice of their appointment by publishing the same for two weeks in a newspaper published in their towns, if any; otherwise by posting such notice in two or more public places therein.

Duties and powers of inspectors. SEC. 45 (as amended by chapter 292, laws of 1897). Inspectors shall keep an office and books for the purpose of recording the names and places of business of all persons selling milk within their limits. They may enter any place where milk is kept or stored for sale, and examine all carriages used in the conveyance thereof, and when they have reason to believe any milk found therein to be adulterated, they shall take specimens thereof, and cause them to be analyzed or otherwise satisfactorily tested, and they shall preserve the result as evidence. Said inspectors shall leave with the owner of the milk inspected a sealed specimen of the milk examined by them, which shall be marked in the same manner as the specimen taken at that time by said inspectors, and prosecute for all violations of the two following sections.

All measures used in sale of milk to be sealed by wine measure. SEC. 46 (as amended by chapter 20, laws of 1887). All measures, cans, or other vessels used in the sale of milk shall annually be sealed by the sealer of weights and measures, by wine measure, and shall be marked by the sealer with figures, indicating the quantity which they hold, and whoever fraudulently sells by any other measure, can, or vessel forfeits twenty dollars for each offense.

Selling impure or adulterated milk; penalty. SEC. 47 (as amended by chapter 255, laws of 1893). Whoever, acting for himself, or as the employee of another, knowingly or wilfully sells or offers for sale milk from cows diseased, sick, or fed upon the refuse of breweries or distilleries, or upon any substance deleterious to its quality, or milk to which water or any foreign substance has been added, or sells or offers for sale as pure milk any milk from which cream has been taken, forfeits twenty dollars for the first and fifty dollars for every subsequent offense, to be recovered for the town where the offense is committed by complaint and indictment. When milk is deemed adulterated, shall, by the gravimetric analysis, be found to contain over eighty-eight per cent of water, it shall be deemed *prima facie* evidence that said milk has been watered, and when milk by the analysis aforesaid shall be found to contain less than twelve per cent of solids and less than three per cent of fat, shall be deemed, *prima facie*, milk from which cream has been taken, and any milk which, by the analysis aforesaid, shall be found to contain any foreign substance shall be deemed milk to which a foreign substance has been added.

¹ 44 -- Public Laws, 1889, chapter 25, section 1; 1870, chapter 116, section 1. 45-47 -- Public Laws, 1886, chapter 25, sections 2, 3, 5.

PUBLIC LAWS OF 1895, Chapter 144.

AN ACT relating to health and boards of health. (Approved March 26, 1895.)

Holding diseased meat or milk for human food; penalty. SECTION 1. The owner or other person having charge of any animal, or meat or milk of any animal affected with tuberculosis or other contagious or infectious disease, who, knowing that the animal is thus affected, shall hold the animal or its meat or milk for human food, shall be liable, on conviction, to a fine of not less than twenty-five dollars nor more than fifty dollars.

PUBLIC LAWS OF 1895, Chapter 169.

AN ACT for the protection of dairymen. (Approved March 27, 1895.)

Glassware for milk tests to be tested and marked. SECTION 1. All bottles, pipettes, or other measuring glasses used by any person, firm, or corporation, or their agents or employees, at any creamery, butter factory, cheese factory, or condensed-milk factory, or elsewhere in this State, in determining by the Babcock test, or by any other test, the value of milk or cream received from different persons or parties at such creameries or factories, shall before use be tested for accuracy of measurement and for accuracy of the per cent scale marked thereon. Such bottles, pipettes, or measuring glasses shall bear in marks or characters ineffaceable the evidence that such test has been made by the authority named in section two of this act. And no inaccurate bottles, pipettes, or other glasses shall bear such marks or characters.

Glassware to be tested by State experiment station director. SEC. 2. It is hereby made the duty of the director of the State College Experiment Station, or other competent person designated by him, to test the accuracy of all bottles, pipettes, or other measuring glasses used by persons, firms, or corporations in this State buying or pooling milk or cream, or apportioning butter or cheese made from the same by the contents of butter fat contained therein. The director of the experiment station, or the person designated by him, shall mark such bottles, pipettes, or other measuring glasses as are found correct, in marks or characters which can not be erased, and which marks or characters shall stand as proof that they have been so tested. The director of the experiment station shall receive for such service the actual cost incurred, and no more, the same to be paid by the persons or corporations for whom it is done.

Certificate required for tester, when. SEC. 3. Any person, either by himself or in the employ of any other person, firm, or corporation, who manipulates the Babcock test, whether mechanical or chemical, for the purpose of measuring the contents of butter fat in milk or cream for the basis of apportioning the value of such milk or cream, or the butter or cheese made from the same, shall secure a certificate from the superintendent of the dairy school of the State College of Agriculture and Mechanic Arts that he or she is competent and well qualified to perform such work. The rules and regulations in the application for such certificate and in the granting of the same shall be such as the superintendent of that school may arrange, and the fee for issuing such certificate shall in no case exceed one dollar, the same to be paid by the applicant.

Use of sulphuric acid having specific gravity below 1.82; penalties. SEC. 4. Whoever uses, or has in his possession with intent to use, at any creamery, butter factory, cheese factory, or condensed-milk factory, any sulphuric acid of less than one and eighty-two hundredths of specific gravity in the process known as the Babcock test, or any other test for determining the butter-fat contents of milk or cream, shall, on conviction, pay a fine not exceeding twenty-five dollars for the first offense, and for a second offense a sum not exceeding fifty dollars. Any person, firm, or corporation violating the provisions of section one of this act shall, on conviction, pay a fine not exceeding fifty dollars for the first offense, and for a second offense a sum not exceeding one hundred dollars; and any person violating section three of this act shall, on conviction, pay a fine not exceeding ten dollars. And it shall be the duty of every inspector of milk, sheriff, deputy sheriff, and constable to institute complaint against any person or persons violating the within-named provisions of this act, and on conviction one-half of the fines shall go to complainant and the balance to the State.

In effect. SEC. 5. This act shall take effect in six months from the date of its approval.

Sale, etc., of imitations of butter and cheese, etc.; penalty. SEC. 3 (as amended by chapter 297, 1883, and chapter 143, 1895, Laws of Maine). Whoever, by himself or his agent, manufactures, sells, exposes for sale, or has in his possession with intent to sell, or takes orders for the future delivery of any article, substance, or compound made in imitation of yellow butter or cheese, and not made exclusively and wholly of cream or milk, or containing any fats, oil, or grease not produced from milk or cream, whether said article, substance, or compound be named oleomargarine, butterine, or otherwise named, forfeits for the first offense one hundred dollars, and for the second and each subsequent offense two hundred dollars, to be recovered by indictment with costs, one-third part to go to the complainant and the balance to the State. And it shall be the duty of **Complaints.** every inspector of milk, sheriff, deputy sheriff, and constable, as named in section five of this chapter, to institute complaint against any person or persons violating the above-named provisions of said third section.

SEC. 4. (Repealed, chapter 297, 1885.)

Officials to institute complaints. SEC. 5. Every inspector of milk, sheriff, deputy sheriff, or constable shall institute complaint for violations of the two preceding sections whenever he has reasonable cause for suspicion, and on the information of any person who shall lay before him satisfactory evidence of the same. The said inspector or officer shall take specimens of suspected butter or cheese and cause the same to be analyzed or otherwise satisfactorily tested. The expense of such analysis or test, not exceeding twenty dollars in any one case, may be included in the costs of prosecution and taxed and allowed to the officer paying the same.

Butter and cheese defined. SEC. 6. For the purposes of the three preceding sections, the terms "butter" and "cheese" mean the products usually known by those names, and which are manufactured exclusively from milk or cream or both, with salt and rennet, and with or without coloring matter.

MARYLAND.²

PUBLIC GENERAL LAWS, 1888, Article 27.

Substitutes for butter and cheese prohibited. SECTION 88. No person shall manufacture, out of any oleaginous substance or substances, or any compound of the same other than that produced from unadulterated milk, or of cream from the same, any article designed to take the place of butter or cheese produced from pure, unadulterated milk or cream of the same, or shall sell or offer for sale the same as an article of food. This provision shall not apply **Skim cheese permitted.** to pure skim milk or cheese made from pure skim milk. Whoever violates the provisions of this section shall be guilty of a misdemeanor, and be punished by a fine of not less than one hundred dollars nor more than five hundred dollars, or by not less than six months or more than one year imprisonment, or both such fine and imprisonment for the first **Penalty.** offense, and by imprisonment for one year for each subsequent offense.

Imitations of butter and cheese prohibited. SEC. 89. No person, by himself or his agents or servants, shall render or manufacture out of any animal fat or animal or vegetable oils not produced from unadulterated milk, or cream from the same, any article in imitation or semblance of natural butter or cheese produced from pure, unadulterated milk or cream of the same; nor mix, compound with, or add to milk, cream, or butter, any acids or other deleterious substance, or any animal fats or animal or vegetable oils not produced from milk or cream, so as to produce any article or substance, or any human food in imitation or semblance of natural butter or cheese; nor sell, keep for sale, or offer for sale, any article, substance, or compound made, manufactured, or produced in violation of the provisions of this section, whether such article, substance, or compound shall be made or produced in this State or elsewhere. This section shall not be so construed as to require evidence of a willful or intentional violation

¹ 3-6: Public Laws, 1883, chapter 154, sections 1, 2, 4, 5.

² 88: Laws, 1886, chapter 456, section 1; 1888, chapter 312, section 1. 89-91: Laws, 1888, chapter 312, sections 2-4.

thereof. Whoever violates the provisions of this section shall be guilty of a misdemeanor, and be punished by a fine of not less than one hundred dollars nor more than five hundred dollars, or not less than six months or more than one year's imprisonment for the first offense, and by imprisonment for one year for each subsequent offense. Nothing in this section shall impair the provisions of the preceding section.

Mixing foreign products with milk, cream, etc. SEC. 90. No person shall manufacture, mix, or compound with, or add to natural milk, cream, or butter any animal fats or animal or vegetable oils; nor shall he make or manufacture any oleaginous substance not produced from milk or cream, with intent to sell the same for butter or cheese made from unadulterated milk or cream, or have the same in his possession, or offer the same for sale with such intent; nor shall any article or substance or compound so made or produced be sold intentionally or otherwise as and for butter or cheese, the product of the dairy. No person shall coat, powder, or color with annatto, or any coloring matter whatever, butterine or oleomargarine or any compound of the same, or any product or manufacture made in whole or in part from animal fats or animal or vegetable oils not produced from unadulterated milk or cream, whereby the said product, manufacture, or compound shall resemble butter or cheese, the product of the dairy, or shall have the same in his possession with intent to sell the same, or shall sell or offer the same for sale. No person shall be excused from liability under this section or the preceding section on account of want of knowledge of the nature or ingredients of the product so in his possession, sold or offered for sale by him. Whoever violates any of the provisions of this section shall be guilty of a misdemeanor, and be punished by a fine of not less than one hundred dollars nor more than one thousand dollars. This section shall not be construed to impair or affect the provisions of the two preceding sections.

Use of imitations, etc., in hotels, etc., prohibited. SEC. 91. No keeper or proprietor of any bakery, hotel, tavern, boarding house, restaurant, saloon, lunch counter, or place of public entertainment, or any person having charge thereof or employed thereat, shall keep, use, or serve therein, either as food for the guests, boarders, patrons, or customers, or for cooking purposes, any article made in violation of the provisions of the three preceding sections. This section shall not be so construed as to require evidence of a willful or intentional violation thereof. Whoever violates the provisions of this section shall be guilty of a misdemeanor, and punished by a fine of not less than fifty dollars nor more than two hundred dollars, or not less than ten days or more than thirty days' imprisonment for the first offense, and by imprisonment for one year for each subsequent offense.

LAWS OF 1890, Chapter 604.

AN ACT to add additional sections to article forty-three of the Code of Public General Laws, title "Health," to be numbered "sections forty-eight, forty-nine, fifty, fifty-one, fifty-two, fifty three, fifty-four, fifty-five, fifty-six, and fifty-seven," so as to provide for the prevention of the adulteration of articles of food and drink and the sale thereof when adulterated or unwholesome. (Approved April 8, 1890.)

Mixtures, etc., must be sold under true name. SEC. 48. That no person shall mix, color, stain, or otherwise sophisticate any article of food or drink with any other ingredient or material for the purpose of gain or profit, nor shall sell or offer for sale any article so mixed, colored, stained, or otherwise sophisticated, unless the same be manufactured, used or sold, or offered for sale, under its true and appropriate name, and unless a notice that the same is mixed or impure is marked, printed, or stamped upon each package, roll, parcel, or vessel containing the same, so as to be and remain at all times readily visible, or unless the person purchasing the same is fully informed by the seller of the true name and ingredients (if other than such as are known by the common name thereof) of such article of food or drink at the time of making sale thereof or offering to sell the same.

Mixtures to be stamped. SEC. 49. That no person shall mix any glucose, grape sugar, or other article of adulteration with any syrup, honey, or sugar intended for human food, or any oleomargarine, suine, beef fat, lard, or any foreign substance with any butter, cheese, intended for human food, nor mix or mingle any glucose, grape sugar, oleomargarine, or other adulterant with any article of food or dietics without distinctly marking, stamping, or labeling the

article or the package containing the same with the true and appropriate name of such adulterant, and the percentage in which it is used for the purpose of adulteration or enters into the composition of the article so adulterated; nor shall any person sell, offer for sale, or permit to be sold, or offered for sale, any article of food or drink or dietics into the composition of which any adulterant has entered without at the same time informing the buyer of the food and the preparation in which such adulterant has been used: *Provided*, That nothing in this section shall be construed to prevent the use of glucose or grape sugar in the manufacture of candy.

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Penalty. SEC. 51. That if any person shall fraudulently adulterate for the purpose of sale, or shall sell or offer for sale, any substance intended for the food of man, or any wine, vinegar, spirits, malt liquors, or other liquor intended for drink or dietetic purposes, knowing the same to be adulterated or in any way sophisticated, he shall be punished by imprisonment in the county jail not longer than one year, or by fine not exceeding five hundred dollars; and the article so adulterated shall be forfeited and destroyed, or so disposed of as to prevent it from being exposed for sale or used for the food of man.

Selling diseased, unwholesome food; penalty. SEC. 52. That if any person shall sell or offer for sale any kind of diseased, corrupted, or unwholesome provisions, such as poultry, game, flesh, or preparations of flesh, fruits, vegetables, bread, flour, meal, milk, or other things intended to be used for human food, he shall be punished by imprisonment in the county jail not more than one year, or by fine not exceeding five hundred dollars, or by both fine and imprisonment, in the discretion of the court having jurisdiction; and the unwholesome provisions offered or exposed for sale shall be forfeited and destroyed, or so disposed of as to prevent their being used for food: *Provided*, That nothing in this section shall apply to the shippers or consignors of green fruits or vegetables that may be spoiled in transit.

State board of health to enforce act. SEC. 53. That the State board of health shall be charged with the duty of rendering effective the provisions of this act, and shall take such steps and do such things as the board may deem necessary to detect and publicly expose any adulteration or corruption of all articles sold or liquid intended or offered for sale as food or drink; and shall, when deemed necessary, have the suspected article subjected to chemical or other scientific examination in order to establish more clearly the fact and degree of adulteration.

Duty of board. SEC. 54. That whenever the said board of health, or its proper officer, shall be satisfied that any article of food, condiment, or drink has been adulterated, or is otherwise unsound or unwholesome, the said board, or its proper officer, shall forbid the sale or disposal of such article for human food and order it to be destroyed or so disposed of as to prevent it from being exposed for sale or used for the food of man; and the person or persons to whom the same belongs, or did belong at the time of exposure for sale, or in whose possession or on whose premises the same was found, refusing or neglecting to destroy or otherwise dispose of such unsound or unwholesome article as directed shall be liable to the penalty imposed under the provisions of the fifty-second section of this act.

Powers of board. SEC. 55. That the said State board of health, or its proper officer, or any inspector or inspectors appointed by said board, are empowered at all reasonable times to inspect and examine any live animal, carcass, meat, poultry, game, flesh, fish, fruits, vegetables, bread, milk, wine, spirits, malt or other liquors, or thing exposed for sale or deposited in any place for the purpose of sale, or of preparation for sale and intended for the food of man, the proof that the same was not exposed or deposited for any such purpose, or was not intended for the food of man, resting with the party charged; and if such animal, carcass, meat, poultry, game, flesh, fish, fruits, vegetables, bread, milk, or other things appear to the said board or its proper officer or inspector to be diseased or unsound or unwholesome and unfit for the food of man, the said board, or its proper officer, shall issue an order preventing the sale of such article or articles for human food; and any person neglecting or refusing to obey such an order shall be deemed guilty of a misdemeanor, and shall be punished by fine in any sum not less than fifty dollars, and in default of the payment thereof, by imprisonment in a public jail not more than six months.

State's attorney to prosecute. SEC. 56. That it is hereby made the duty of the prosecuting attorneys of this State to appear for the people and to attend to the prosecution of all complaints under this act in all the courts of their respective counties or the city of Baltimore, as the case may be.

Appropriation. SEC. 57. That the sum of twenty-five hundred dollars, or so much thereof as may be necessary, be annually appropriated for defraying the expenses of chemical and scientific examination of suspected articles of food or drink; the salary of inspectors and their necessary expenses to be paid by the treasurer of the State on the warrant of the comptroller, at such times and in such sums as the board may direct.

In effect. SEC. 9. That this act shall take effect from the date of its passage.

LAWS OF 1894, Chapter 53.

AN ACT to authorize the mayor and city council of Baltimore to provide for the inspection and regulation of the sale of milk or any or all other food products offered for sale in the city of Baltimore, or intended for consumption therein. (Approved March 7, 1894.)

Inspection of milk and other food products in Baltimore. SECTION 1. That the mayor and city council of Baltimore shall have power to provide by ordinance for the proper inspection of milk or any and all other food

products offered for sale in the city of Baltimore, or intended for consumption therein; to make and from time to time to alter such regulations in regard to the sale of milk or any or all other food products as to them may seem necessary to

Penalty. protect the public health; and to provide, by a fine of not more than one hundred dollars for each offense, for the punishment of violations against such regulations and ordinances; to provide for such number of inspectors or analysts as they may deem necessary, and to fix their duties and compensation, and from time to time to change the number, duties, and compensation of said inspectors and analysts.

In effect. SEC. 2. That this act shall take effect from the date of its passage.

MASSACHUSETTS.¹

ACTS OF 1891, Chapter 412. (Approved June 11, 1891.)

Dairy bureau; how formed. SECTION 7 (as modified by chapter 139, section 1, acts of 1892). In order to secure the better enforcement of the provisions of this act and to promote the improvement of the products of the dairy, the governor, by and with the advice and consent of the council, shall appoint three members of the board of agriculture, to constitute a dairy bureau of said board, one to serve for three years, one for two years, and one for one year from the first day of July in the year eighteen hundred and ninety-one, or for such shorter terms, respectively, as they may continue to be members of said board of agriculture; and, prior to the first day of July in each succeeding year, the governor shall appoint from said board one member of said bureau to serve for three years or for such shorter term, as aforesaid. No person shall continue to be a member of said bureau after he has ceased to be a member of said board, but, on his ceasing to be a member of said board, his place on said bureau shall be filled by the appointment of another member of said board, as aforesaid. The secretary of said board shall be the executive officer of said bureau.

Executive officer; salary. subject to its control and direction, and said secretary shall, upon assuming said duties, receive, in addition to his present salary, five hundred dollars per annum. The governor may at any time terminate the service of any member of said board as a member of said bureau and may appoint any other

Powers of bureau. member of said board in his place, as above provided. Members of said bureau shall have power to enforce all laws relating to dairy products and imitations thereof, and to employ such agents, assistants, experts, chemists, or counsel as may be necessary therefor. Said bureau, in the discharge of its duties, shall be subject to the general direction and control of the

Compensation of members. board of agriculture. The members of the State dairy bureau shall be allowed, from the treasury of the Commonwealth, five dollars a day for each day of actual service in the discharge of their

¹Arranged as in "Laws of Massachusetts relating to dairy products and their imitations, with a digest of supreme court decisions thereon." Published in 1896 by the dairy bureau.

duties as members of said bureau, in addition to their actual travelling expenses. The amount so allowed shall be paid from the sum now limited by section eight of chapter four hundred and twelve for carrying forward the work of said bureau.

Assistant to board and salary. SEC. 6. The governor, by and with the consent of the council, shall appoint an assistant to the secretary of the board of agriculture, at an annual salary of twelve hundred dollars, and expenses necessarily incurred in the discharge of his duties, to assist in the work prescribed in the eleventh section of this act. Said appointee shall hold office for two years or till his successor is appointed, unless sooner removed from office by the governor, and his successor shall be appointed as above provided for.

Expenditures; reports. SEC. 8 (as modified by section 1, chapter 214, acts of 1895). The bureau may expend a sum not exceeding seven thousand dollars in carrying forward the work of the bureau, and shall make annual reports in detail to the legislature, not later than the fifteenth day of January in each year, of the number of assistants, experts, chemists, agents, and counsel employed, and their expenses and disbursements, with such other information as shall be for the advantage of the dairy interests in the State, and they shall make full reports of all investigations made by them with all cases prosecuted and the results of such prosecution. They shall make detailed statements of the said expenses to the auditor of the Commonwealth, on which payment shall be made to the extent of the appropriation.

Powers and authority. SEC. 9 (as amended by section 5, chapter 230, acts of 1894). Said bureau and such agents and counsel as they shall duly authorize for that purpose shall have access, ingress and egress to and from all places of business, factories, buildings, carriages and cars, used in the manufacture and sale of any dairy products, or imitation dairy products, and shall have access to all vessels and cans used in such manufacture and sale, and shall have all the authority given by law to the State board of health and any officer thereof, and to the milk inspectors, in the enforcement of all laws relating to dairy products, or imitations thereof, and in the prosecutions of violations of said laws.

Penalty for hindrance. Whoever hinders, obstructs, or in any way interferes with an officer or duly authorized agent of the dairy bureau in the performance of his duty, shall be punished by a fine of one hundred dollars for the first offense, and two hundred dollars for each subsequent offense.

Limitations of bureau. SEC. 10. The said bureau may work in unison with the State board of health, and with inspectors of milk, but they shall not restrict, limit or interfere with the duties of said officers. Nothing herein contained shall be held to circumscribe the rights of said bureau in the prosecution of offenders of the so-called dairy laws or all laws, relating to milk, butter, cheese or any adulterations or imitations thereof wherever found within the Commonwealth.

Duties of bureau. SEC. 11. It shall be the duty of said bureau to investigate all dairy products and imitation dairy products bought or sold within the Commonwealth; to enforce all laws for the manufacture, transfer and sale of all dairy products and all imitation dairy products within the Commonwealth, with all the powers needed for the same: to investigate all methods of butter and cheese making in cheese factories or creameries, and to disseminate such information as shall be of service in producing a more uniform dairy product of higher grade and better quality.

PUBLIC STATUTES, Chapter 57.

Appointment of milk inspectors. SECTION 1. The mayor and aldermen of cities¹ shall, and the selectmen of towns may, annually appoint one or more persons to be inspectors of milk for their respective places, who shall be sworn before entering upon the duties of their office. Each inspector shall publish a notice of his appointment for two weeks in a newspaper published in his city or town, or, if no newspaper is published therein, he shall post up such notice in two or more public places in such city or town.

Milk inspectors' duties. SEC. 2 (as amended by section 1, chapter 318, acts of 1886). Such inspectors shall keep an office and shall record in books kept for the purpose the names and places of business of all persons engaged in the sale of milk in their city or town. Said inspectors may, with the approval of

¹ By chapter 313, section 1, acts of 1893, and chapter 449, section 19, acts of 1895, the milk inspectors of Boston and Lynn are appointed by the boards of health of those cities.

the mayor or the selectmen, employ suitable persons to act as collectors of samples, who shall be sworn before entering upon their duties. Said inspectors, or the collectors employed and qualified as aforesaid, may enter all places where milk is stored or kept for sale, and all carriages used for the conveyance of milk, and the said inspectors or the collectors may take samples for analysis from all such places or carriages, and at the same time a portion of each sample so taken, shall, if the person taking the same be requested so to do, be sealed and delivered to the owner or person from whose possession the same is taken and a receipt given therefor to the person taking the same.

Compensation. The inspectors shall cause the samples of milk so taken to be analyzed or otherwise satisfactorily tested, the results of which analysis or test they shall record and preserve as evidence. The inspectors shall receive such compensation as the mayor and aldermen or selectmen may determine.

Licensing of milk peddlers. SEC. 3. In all cities, and in all towns in which there is an inspector of milk, every person who conveys milk in carriages or otherwise for the purpose of selling the same in such city or town shall annually, on the first day of May, or within thirty days thereafter, be licensed by the inspector or inspectors of milk of such city or town to sell milk within the limits thereof, and shall pay to such inspector or inspectors fifty cents each to the use of the city or town. The inspector or inspectors shall pay over monthly to the treasurer of such city or town all sums collected by him or them.

Licenses and signs. Licenses shall be issued only in the names of the owners of carriages or other vehicles, and shall for the purposes of this chapter be conclusive evidence of ownership. No license shall be sold, assigned, or transferred. Each license shall record the name, residence, place of business, number of carriages or other vehicles used, name and residence of every driver or other person engaged in carrying or selling said milk, and the number of the license. Each licensee shall before engaging in the sale of milk cause his name, the number of his license, and his place of business to be legibly placed on each outer side of all carriages or vehicles used by him in the conveyance and sale of milk, and he shall report to the inspector or inspectors any change of driver or other person employed by him which may occur during the term of his license. Whoever, without being first licensed under the provisions of this section, sells milk or exposes it for sale from carriages or other vehicles, or has it in his custody or possession with intent so to sell, and whoever violates any of the provisions of this section, shall for a first offense be punished by fine of not less than thirty nor more than one

Penalty. hundred dollars; for a second offense by fine of not less than fifty nor more than three hundred dollars; and for a subsequent offense by fine of fifty dollars and by imprisonment in the house of correction for not less than thirty nor more than sixty days.

Registering of milk dealers. SEC. 4. Every person before selling milk or offering it for sale in a store, booth, stand, or market place in a city or in a town in which an inspector or inspectors of milk are appointed, shall register in the books of such inspector or inspectors, and shall pay to him or them fifty cents to the use of such city or town; and whoever neglects so to register

Penalty. shall be punished for each offense by fine not exceeding twenty dollars.

Selling adulterated, diseased, or poor milk; penalty. SEC. 5 (as amended by section 2, chapter 318, acts of 1886). Whoever, by himself or by his servant or agent, or as the servant or agent of

any other person, sells, exchanges, or delivers, or has in his custody or possession with intent to sell or exchange, or exposes or offers for sale or exchange, adulterated milk, or milk to which water or any other foreign substance has been added, or milk produced from cows fed on the refuse of distilleries, or from sick or diseased cows, or milk not of good standard quality, shall for a first offense be punished by fine of not less than fifty nor more than two hundred dollars; for a second offense by fine of not less than one hundred nor more than three hundred dollars, or by imprisonment in the house of correction for not less than sixty days; and for a subsequent offense by fine of fifty dollars and by imprisonment in the house of correction for not less than sixty nor more than ninety days.

Selling milk from which cream has been removed; penalty. SEC. 6. Whoever by himself or by his servant or agent, or as the servant or agent of any other person, sells, exchanges, or delivers, or has in his custody or possession, with intent to sell or exchange, or exposes or offers for sale as pure milk, any milk from which the cream or a part thereof has been removed shall be punished by the penalties provided in the preceding section.

How skimmed milk may be sold. SEC. 7 (as amended by section 7, chapter 352, acts of 1885, and by section 1, chapter 398, acts of 1896). No person, by himself or his agents, shall sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, milk from which the cream or any part thereof has been removed, unless in a conspicuous place upon every vessel, can, or package of more than two quarts capacity from or in which such milk is sold, exchanged, or delivered the words "Skimmed milk" are distinctly marked in plain, uncondensed Gothic letters not less than one inch in length, said marking to be in dark letters on a light ground, and to be on the vessel, can, or package itself and not upon a detachable label or tag; and unless in a conspicuous place upon every vessel, can, or package of two quarts or less capacity from or in which such milk is sold, exchanged, or delivered the words "Skimmed milk" are distinctly marked in plain, uncondensed Gothic letters, said marking to be in dark letters on a light ground, and to be either on the vessel, can, or package itself, or upon a detachable label or tag. Whoever violates the provisions of this section shall be punished by the penalties provided in section five.

Penalty for hindrance. SEC. 8 (as amended by section 5, chapter 310, acts of 1884). Any inspector of milk, and any servant or agent of an inspector who wilfully connives at or assists in a violation of the provisions of this chapter, and whoever hinders, obstructs, or in any way interferes with any inspector of milk, or any servant or agent of an inspector in the performance of his duty, shall be punished by a fine of not less than one hundred nor more than three hundred dollars, or by imprisonment for not less than thirty nor more than sixty days.

Milk standard. SEC. 9 (as amended by section 6 of chapter 352 of the acts of the year 1885, and by section 2 of chapter 318 of the acts of the year 1886, and by section 2, chapter 398, acts of 1896). In all prosecutions under this chapter, if the milk is shown upon analysis to contain less than thirteen per cent of milk solids, or to contain less than nine and three-tenths per cent of milk solids exclusive of fat, or to contain less than three and seven-tenths per cent of fat, it shall be deemed for the purposes of this act to be not of good standard quality, except during the months of April, May, June, July, and August, when milk containing less than twelve per cent of milk solids, or less than nine per cent of milk solids exclusive of fat, or less than three per cent of fat, shall be deemed to be not of good standard quality.

Duty of inspector. SEC. 10. It shall be the duty of every inspector to institute a complaint for a violation of any of the provisions of this chapter on the information of any person who lays before him satisfactory evidence by which to sustain such complaint.

Advertising convictions. SEC. 11. Each inspector shall cause the name and place of business of every person convicted of selling adulterated milk, or of having the same in his possession with intent to sell, to be published in two newspapers in the county in which the offense was committed.

ACTS OF 1885, Chapter 352. (In effect June 18, 1885.)

Skimmed milk standard. SECTION 8. No person shall sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, skimmed milk containing less than nine and three-tenths per cent of milk solids exclusive of fat. Whoever violates the provisions of this section shall be punished by the penalties provided in section five of chapter fifty-seven of the Public Statutes.

ACTS OF 1886, Chapter 318. (In effect June 23, 1886.)

Sealed sample given to person from whom milk is taken. SECTION 3. If the said [milk] inspector or collector after being so requested shall refuse or neglect to seal and deliver to the owner or person from whose possession the same is taken, as provided in section one of this act, a portion of the sample taken as aforesaid, no evidence shall be received in any court of the results of the analysis or test of the same, which may have been recorded and preserved as aforesaid.

Penalty for counterfeiting seal. SEC. 4 (as amended by section 3, chapter 398, acts of 1896). Whoever makes, causes to be made, uses, or has in his possession any imitation or counterfeit of any seal used by any inspector of milk, collector of samples, or other official engaged in the inspection of milk, and whoever changes or in any way tampers with any sample taken or sealed as pro-

vided in section two, shall be punished by a fine of not less than one hundred dollars and by imprisonment in the house of correction not less than three nor more than six months.

ACTS OF 1894, Chapter 425. (In force May 22, 1894.)

Sample to be taken, when. No producer of milk shall be liable to prosecution on the ground that the milk produced by him is not of good standard quality, unless the milk alleged not to be of such quality was taken upon the premises or while in the possession or under the control of the producer by an inspector of milk or by the agents of the dairy bureau or State board of health, or collector of samples duly authorized by such inspector, and a sealed sample of the same given to the producer.

ACTS OF 1896, Chapter 264.

Selling canned milk. SECTION 1. No person shall sell or offer for sale or exchange, in hermetically sealed cans, any condensed milk or condensed skim milk, unless in cans which are distinctly labelled with the name of the person or company manufacturing said condensed milk or skim milk, the brand under which it is made, and the contents of the can.

Condensed milk. SEC. 2. Condensed milk sold from cans or packages not hermetically sealed shall be branded or labelled with the name of the manufacturer.

Penalty. SEC. 3. Any person violating the provisions of this act shall be subject to the same penalties as for the adulteration of milk.

PUBLIC STATUTES, Chapter 56.

Imitation butter; packages to be marked. SECTION 17 (as amended by section 1, chapter 317, acts of 1886). Whoever, by himself or his agents, sells, exposes for sale, or has in his possession with intent to sell, any article, substance, or compound, made in imitation or semblance of butter or as a substitute for butter, and not made exclusively and wholly of milk or cream, or containing any fats, oils, or grease not produced from milk or cream, shall have the words, "Imitation butter," or if such substitute is the compound known as oleomargarine, then the word "Oleomargarine," or if it is known as butterine, then the word "Butterine," stamped labelled, or marked in a straight line in printed letters of plain, uncondensed Gothic type, not less than one-half inch in length, so that said words can not be easily defaced, upon the top, side, and bottom of every tub, firkin, box, or package containing any of said article, substance, or compound. The stamp, label, or mark shall contain no other words. And whoever, by himself or his agents, exposes or offers for sale any of the said article, substance, or compound not in the original package, shall attach to the said article, substance, or compound, in a conspicuous place a label bearing the words, "Imitation butter," "Oleomargarine," or "Butterine," as the article may be, in printed letters of plain, uncondensed Gothic type, not less than one-half inch in length; and in cases of retail sales of any of said article, substance, or compound not in the original packages, the seller shall, by himself or his agents, attach to each package so sold, and shall deliver therewith to the purchaser, a label or wrapper bearing in a conspicuous place upon the outside of the package the words "Imitation butter," "Oleomargarine," or "Butterine," and no other words, in printed letters in a straight line of plain, uncondensed Gothic type, not less than one-half inch in length.

Label with retail sales. **Imitation cheese; packages to be marked.** SEC. 18. Whoever, by himself or his agents, sells, exposes for sale, or has in his possession with intent to sell, any article, substance, or compound made in imitation or semblance of cheese, or as a substitute for cheese, and not made exclusively and wholly of milk or cream, or containing any fats, oils, or grease not produced from milk or cream, shall have the words "Imitation cheese" stamped, labelled, or marked in printed letters of plain Roman type not less than one inch in length, so that said words can not be easily defaced, upon the side of every cheese-cloth or band around the same, and upon the top and side of every tub, firkin, box, or package containing any of said article, substance, or compound; and in cases of retail sales of any of said article, substance, or compound not in the original packages the seller shall, by himself or his agents, attach to each package so sold at retail and shall deliver therewith to the

purchaser a label or wrapper bearing in a conspicuous place upon the outside of the package the words "Imitation cheese," in printed letters of plain Roman type not less than one-half an inch in length.

Penalty. SEC. 19 (as amended by section 2, chapter 317, acts of 1886). Whoever sells, exposes for sale, or has in his possession with intent to sell, any article, substance, or compound made in imitation or semblance of butter or cheese, or as a substitute for butter or cheese, except as provided in the two preceding sections, and whoever, with intent to deceive, defaces, erases, cancels, or removes any mark, stamp, brand, label, or wrapper provided for in said sections, or in any manner shall falsely label, stamp, or mark any box, tub, article, or package marked, stamped, or labelled as aforesaid, shall for every such offense forfeit to the city or town where the offense was committed one hundred dollars, and for a second and each subsequent offense two hundred dollars.

Duty of milk inspectors and powers relative to brands, labels, etc.

SEC. 20 (as amended by section 2, chapter 310, acts of 1884). Inspectors of milk shall institute complaints for violations of the provisions of the three preceding sections when they have reasonable cause to believe that such provisions have been violated, and on the information of any person who lays before them satisfactory evidence by which to sustain such complaint. Said inspectors may enter all places where butter or cheese is stored or kept for sale, and said inspectors shall also take specimens of suspected butter and cheese and cause them to be analyzed or otherwise satisfactorily tested, the result of which analysis or test they shall record and preserve as evidence, and a certificate of such result sworn to by the analyzer shall be admitted in evidence in all prosecutions under this and the three preceding sections. The expense of such analysis or test, not exceeding twenty dollars in any one case, may be included in the costs of such prosecutions. Whoever hinders, obstructs, or in any way interferes with any inspector or any agent of an inspector in the performance of his duty shall be punished by a fine of fifty dollars for the first offense and of one hundred dollars for each subsequent offense.

Butter and cheese defined. SEC. 21. For the purposes of the four preceding sections the terms "butter" and "cheese" shall mean the products which are usually known by these names and are manufactured exclusively from milk or cream with salt and rennet and with or without coloring matter.

ACTS OF 1886, Chapter 317.

Use of dairy nomenclature; penalty. SECTION 3 (as amended by section 1, chapter 280, acts of 1894). Whoever, by himself or his agents, sells, exposes for sale, or has in his possession with intent to sell any article, substance, or compound made in imitation or semblance of butter or as a substitute for butter, and not made exclusively and wholly of milk or cream, or containing any fats, oils, or grease not produced from milk or cream, contained in any box, tub, article, or package marked or labelled with the word "dairy" or the word "creamery" or the name of any breed of dairy cattle, shall for every such offense forfeit to the city or town where the offense was committed one hundred dollars, and for a second and each subsequent offense two hundred dollars.

Persons who convey must be licensed. SEC. 4. Every person who conveys any imitation butter, oleomargarine, or butterine in carriages or otherwise, for the purpose of selling the same in any city or town, shall within thirty days of the passage of this act, and annually on the first day of May, or within thirty days thereafter, be licensed by the inspector or inspectors of milk of such city or town to sell the same within the limits thereof, and shall pay to such inspector or inspectors fifty cents to the use of the city or town. The inspector or inspectors shall pay over monthly to the treasurer of such city or town all sums collected by him or them. In towns in which there is no inspector of milk, licenses shall be issued by the town clerk. Licenses shall be issued only in the names of the owners of carriages or other vehicles, and shall for the purposes of this chapter be conclusive evidence of ownership. No license shall be sold, assigned, or transferred. Each license shall record the name, residence, place of business, number of carriages or other vehicles used, the name and residence of every driver or other person engaged in carrying or selling imitation butter, oleomargarine, or butterine, and the number of the license. Each licensee shall, before engaging in the sale of any of the articles as aforesaid, cause his name, the number of his license, and his place of business to be legibly placed on each outer side of all carriages or vehicles used by

him in the conveyance and sale of the articles as aforesaid, in Gothic letters not less than one inch in length, and he shall report to the inspector or inspectors any change of driver or other persons employed by him which may occur during the time of his license. Whoever, without being first licensed under the provisions of this section, sells any of the said articles as aforesaid or exposes or Penalty. offers them for sale from carriages or other vehicles, or has them in his custody or possession with intent so to sell, and whoever violates any of the provisions of this section, shall, for a first offence, be punished by fine of not less than thirty nor more than one hundred dollars; for a second offence, by fine of not less than fifty nor more than three hundred dollars.

Persons who sell must be registered. SEC. 5. Every person, before selling or offering for sale any of the said articles in a store, booth, stand, or market place in a city or in a town in which an inspector or inspectors of milk are appointed, shall within thirty days of the passage of this act, and annually on the first day of May or within thirty days thereafter, register in the books of such inspector or inspectors, or if there be no inspector, then in the book of the town clerk, and shall pay to him or them fifty cents to the use of such city or town; and whoever neglects to so register shall be punished for each Penalty. offense by fine not exceeding twenty dollars.

ACTS OF 1891, Chapter 58.

Imitation of yellow butter prohibited. SECTION 1 (as amended by section 6, chapter 280, acts of 1894, and by section 1, chapter 377, acts of 1896). No person, by himself or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, take orders for the future delivery of, have in his possession, keep in storage, distribute, deliver, transfer, or convey with intent to sell within this Commonwealth any article, product, or compound made wholly or partly out of any fat, oil, or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of Oleomargarine permitted. the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter.

Penalty. SEC. 2. Whoever violates any of the provisions of section one of this act shall be punished by a fine of not less than one hundred dollars nor more than five hundred dollars or by imprisonment in the house of correction for a term not exceeding one year.

Inspections for imitations of yellow butter; duties of milk inspectors. SEC. 3. Inspectors of milk shall institute complaints for the violation of the provisions of this act when they have reasonable cause to believe that any of its provisions have been violated; and on the information of any person who lays before them satisfactory evidence by which to sustain such complaint said inspectors may enter all places where butter or imitations thereof are stored or kept for sale, and shall also take specimens of suspected butter and imitations thereof and cause them to be analyzed or otherwise satisfactorily tested, the result of which analysis or test they shall record and preserve as evidence; and a certificate of such result, sworn to by the analyzer, shall be admitted in evidence in all prosecutions under this act. The expense of such analysis or test, not exceeding twenty dollars in any one case, may be included in the costs of such prosecutions. **Obstruction; penalty.** Whoever hinders, obstructs, or in any way interferes with any inspector in the performance of his duty shall be punished by a fine of fifty dollars for the first offense and of one hundred dollars for each subsequent offense.

ACTS OF 1891, Chapter 412. (Approved June 11, 1891.)

Selling oleomargarine for butter; penalty. SECTION 1 (as amended by section 2, chapter 280, acts of 1894). Whoever, by himself or agents, sells or offers for sale, to any person who asks, sends, or inquires for butter, any oleomargarine, butterine, or any substance made in imitation of or semblance of pure butter, not made entirely from the milk of cows, with or without coloring matter, shall be declared guilty of fraud and punished by a fine of not less than one hundred dollars for each offense.

Placard on oleomargarine exposed for sale; penalty. SEC. 2 (as amended by section 3, chapter 280, acts of 1894). Whoever exposes for sale oleomargarine, butterine, or any substance made in imitation or semblance of pure butter not marked and distinguished by all the marks, words, and stamps required by existing laws, and not having in addition thereto upon the exposed contents of every opened tub, package, or parcel thereof a conspicuous placard with the word "Oleomargarine" printed thereon in plain, uncondensed Gothic letters not less than one inch long, shall be fined not less than one hundred dollars for each offense.

Sign in store where oleomargarine is sold; penalty. SEC. 3. Whoever sells oleomargarine, butterine, or any other substance made in imitation or semblance of pure butter from any dwelling, store, office, or public mart shall have conspicuously posted thereon the placard or sign, in letters not less than four inches in length, "Oleomargarine sold here" or "Butterine sold here," said placard to be approved by the bureau hereinafter provided for by this act. Any person neglecting or failing to post the placard herein provided for shall be punished by a fine of not less than one hundred dollars for the first offense and one hundred dollars for each day's neglect thereafter.

Sign on wagon; penalty. SEC. 4 (as amended by section 4, chapter 280, acts of 1894). Whoever, by himself or agents, peddles, sells, solicits orders for the future delivery of, or delivers from any cart, wagon, or other vehicle oleomargarine, butterine, or any substance made in imitation or semblance of pure butter, not having on both sides of said cart, wagon, or other vehicle the placard, in uncondensed gothic letters not less than three inches in length, "Licensed to sell oleomargarine," shall be punished by a fine of not less than one hundred dollars or imprisonment for not less than thirty days for each offense.

Hotels, restaurants, etc., shall give notice; penalty. SEC. 5 (as amended by section 2, chapter 377, of the acts of 1896). Whoever furnishes or causes to be furnished in any hotel, restaurant, boarding house, or at any lunch counter oleomargarine or butterine to any guest or patron of such hotel, restaurant, boarding house, or lunch counter in the place or stead of butter shall notify said guest or patron that the substance so furnished is not butter, and any party so furnishing without such notice shall be punished by a fine of not less than ten nor more than fifty dollars for each offense.

ACTS OF 1889, Chapter 326. (Approved May 9, 1889.)

Feeding garbage to cows; penalty. Whoever knowingly feeds or has in his possession with intent to feed to any milch cow any garbage, refuse, or offal collected by any city or town, by contract or otherwise, shall be punished by imprisonment in the jail or house of correction not exceeding sixty days or by fine not exceeding one hundred dollars.

ACTS OF 1882, Chapter 263. (In effect May 26, 1882.)

Sample must be furnished to officer. SECTION 6. Every person offering or exposing for sale or delivering to a purchaser any drug or article of food included in the provisions of this act shall furnish to an analyst or other officer or agent appointed hereunder who shall apply to him for the purpose and shall tender him the value of the same a sample sufficient for the purpose of analysis of any such drug or article of food which is in his possession.

MICHIGAN.¹

PUBLIC ACTS, 1893, No. 211.

AN ACT to provide for the appointment of a dairy and food commissioner, and to define his powers and duties and fix his compensation. (Approved June 2, 1893.)

Dairy and food commissioner, appointment and term of office. SECTION 1. That within thirty days after this act shall take effect, the governor, by and with the consent of the senate, shall appoint a suitable person to be dairy and food commissioner, which office is hereby

¹ Arranged as in Bulletin No. 22, June, 1897, Michigan State Dairy and Food Commission.

created, and which commissioner so appointed shall hold his office until the first day of January, one thousand eight hundred and ninety-five, and until his successor is appointed and qualified. At the next regular session of the legislature, and every two years thereafter, the governor, by and with the advice and consent of the senate, shall appoint a dairy and food commissioner, who shall hold his office for the term of two years from the first day of January in the year of his appointment, and until his successor is appointed and qualified.

Removal and vacancy. SEC. 2. The governor shall have power to remove such commissioner at any time in his discretion; but the reasons for such removal shall be laid before the senate at the next regular or special session of the legislature thereafter, and in case of a vacancy in the office of commissioner from any cause the governor may appoint another person to fill the same.

Oath and bonds. SEC. 3. Before entering upon the duties of his office, the person so appointed shall make, subscribe, and file in the office of the secretary of state, an oath of office in the form prescribed by section one of article eighteen of the constitution of this State, and shall enter into bonds with the people of the State of Michigan in the sum of ten thousand dollars, with sureties to be approved by the governor, conditioned for the faithful performance of his duties.

Salary and office expenses. SEC. 4 (as amended by act No. 245, Public Acts, 1895; and by act No. 154, Public Acts, 1897). Said commissioner shall receive an annual salary of twelve hundred dollars, payable monthly, on the warrant of the auditor general. His necessary cash outlay for the expenses incidental to the performance of the duties of his office shall be audited by the board of State auditors. The board of State auditors shall provide office room, and the necessary furniture and fixtures, and the necessary stationery supplies and printing for the conduct of the business of the said commissioner on his application to the said board therefor. Said office shall be and remain in the city of Lansing.

Appointment of deputy. The commissioner, by and with the consent of the governor, shall appoint a deputy commissioner, who shall hold office during the pleasure of the commissioner, and who shall take and subscribe the constitutional oath of office and file the same in the office of the secretary of state, and who shall receive an annual salary of one thousand dollars, payable in like manner with that of the commissioner. His necessary cash outlay for the expenses incidental to the performance of the duties of his office shall be audited by the board of State auditors. The commissioners may appoint

Clerks. not to exceed two clerks for the transaction of the business of his office, whose salary shall not exceed the sum of sixty dollars per month each.

Pay of inspectors. The commissioner may also appoint not to exceed six inspectors who shall take and subscribe the constitutional oath of office and file the same in the office of the secretary of state, and who shall hold office during the pleasure of the commissioner. Such inspectors shall have the same right of access to places to be inspected as the said commissioner or his deputy. Such inspectors shall receive as compensation for their services not to exceed the sum of three dollars per day and their necessary expenses when so employed. Such compensation and expenses shall be certified, audited, and paid in the same manner as the salaries and expenses of similar officers are certified, audited, and paid.

State analyst, and compensation. SEC. 5 (as amended by act No. 245, Public Acts, 1895; and by act No. 154, Public Acts, 1897). The commissioner, by and with the consent of the governor, shall appoint a suitable and competent person as State analyst, who shall be a practical analytical chemist, and shall receive an annual salary of not to exceed twelve hundred dollars, payable monthly, on the warrant of the auditor general. The commissioner in like man-

Assistant State analyst, and compensation. ner may also appoint an assistant State analyst, who shall receive an annual salary of not to exceed one thousand dollars, payable monthly on the warrant of the auditor general. Before entering upon the duties of their offices they shall take, subscribe, and file in the office of the secretary of state the constitutional oath of office. Their term of office shall continue during the pleasure of the commissioner. The board of State auditors shall provide a room in connection with the office of the dairy and food commissioner for the laboratory for the State analyst and his assistant, and the necessary furniture and fixtures therefor: the dairy and food commissioner, upon the requisition of the State analyst, shall provide the necessary chemical apparatus and appliances, not to exceed in cost the sum of fifteen hundred dollars, and the necessary chemicals, not to exceed in cost the sum of five hundred dollars in any one year, to enable said State analyst and

his assistant to discharge the duties of their offices. In case of the absence or inability of the State analyst or his assistant to perform their duties, the commissioner may, with the consent of the governor, appoint some competent person to perform the same temporarily, which person shall take, subscribe, and file the constitutional oath of office.

Duties of commissioner. SEC. 6 (as amended by act No. 245, Public Acts, 1895; and by act No. 154, Public Acts, 1897). It shall be the duty of the dairy and food commissioner to carefully inquire into the quality of the dairy and food and drink products, and the several articles which are foods or the necessary constituents of foods, which are manufactured for sale or sold or exposed or offered for sale in this State, and he may in a lawful manner procure samples of the same and direct the State analyst to make due and careful examination of the same, and report to the commissioner the result of the analysis of all or any of such food and drink products or dairy products as is adulterated, impure, or unwholesome, in contravention of the laws of this State; and it shall be the duty of the commissioner to make complaint against the manufacturer or vendor thereof, in the proper county, and furnish the prosecuting attorney with the evidence thereon and thereof to obtain a conviction for the offense charged. The dairy and food

Duties and powers. commissioner, or his deputy, or any person by him duly appointed for that purpose, shall have power, in the performance of their duties, to enter into any creamery, factory, store, salesroom, drug store, or laboratory, or place where they have reason to believe food or drink are made, prepared, sold, or offered for sale, and to open any cask, tub, jar, bottle, or package containing or supposed to contain any article of food or drink, and examine or cause to be examined the contents thereof, and take therefrom samples for analysis. The

Sample to be taken. person making such inspection shall take such sample of such article or product, in the presence of at least one witness, and he shall, in the presence of such witness, mark or seal such sample, and shall tender at the time of taking, to the manufacturer or vendor of such product, or to the person having the custody of the same, the value thereof, and a statement in writing of the reason for taking said sample.

Prosecution of suits, who by. SEC. 7 (as amended by act No. 245, Public Acts, 1895). It shall be the duty of all prosecuting attorneys to prosecute to completion all suits brought by the dairy and food commissioner under the provisions of this act, or any subsequent act relative to the adulteration of food or the sale of impure or unwholesome food or food products. In case the commissioner may deem it expedient he may, upon an order of the court therefor, employ counsel to assist the prosecuting attorney of any county in the prosecution of any such suits. The compensation of such assistant counsel shall be paid out of moneys appropriated for the enforcement of the provisions of this act, upon the certificate of the commissioner.

Analyst shall not furnish certificates. SEC. 8. It shall be unlawful for the State analyst, while he holds his office, to furnish to any individual, firm, or corporation any certificate as to the purity or excellence of any article manufactured or sold by them to be used as food or in the preparation of food.

Contents of annual report. SEC. 9 (as amended by act No. 245, Public Acts, 1895; and by act No. 154, Public Act, 1897). The commissioner shall make an annual report to the governor on or before the first day of July in each year, and which shall be printed and published on or before the first day of September next thereafter, which report shall cover the doings of his office for the preceding fiscal year, which shall show, among other things, the number of manufactories and other places inspected, and by whom, the number of specimens of food articles analyzed, and the State analyst's report upon each one; the number of complaints entered against persons for violation of the laws relative to the adulteration of food, the number of convictions had, and the amount of fines imposed therefor, together with such recommendations relative to the statutes in force as his experience may justify. The commissioner shall also prepare, print, and distribute to all the papers of the State, and to such persons as may be interested, or may apply therefor, a

Monthly bulletin, contents of. monthly bulletin containing results of inspections, the results of analyses made by the State analyst, with popular explanation of the same, and such other information as may come to him in his official capacity relating to the adulteration of food, food and drink products, and of dairy products, so far as he may deem the same of benefit and advantage to the public; also

a brief summary of all the work done during the month by the commissioner and his assistants in the enforcement of the laws of the State, but not more than ten thousand copies of each of such monthly bulletins shall be printed.

Obstruction of commissioner; penalty. SEC. 10 (as added by act No. 245, Public Acts, 1895). Any person who shall wilfully hinder or obstruct the dairy and food commissioner, or his deputy, or other person or inspector by him duly authorized, in the exercise of the powers conferred upon him by this act, shall be deemed guilty of a misdemeanor, and on conviction shall be punished by a fine of not less than ten dollars nor more than one hundred dollars, or by imprisonment in the county jail for not less than ten days nor more than ninety days, or both such fine and imprisonment, in the discretion of the court.

Appropriation for work under this act. SEC. 11 (as added by act No. 245, Public Acts, 1895, and amended by act 154, Public Acts, 1897). There shall be appropriated each year the sum of eighteen thousand dollars, out of which shall be paid in such manner as other similar salaries, expenses, and accounts are allowed and paid, all the salaries and expenses provided for in this act: *Provided*, That all expenses for stationery and printing shall be audited and paid in the same manner as other State printing and stationery.

Tax levy to reimburse treasury. SEC. 12 (as added by act No. 245, Public Acts, 1895, and amended by act 154, Public Acts, 1897). The auditor-general is hereby directed to annually add to and incorporate into the State tax, to be levied each year, the sum of eighteen thousand dollars, to be levied, assessed, and collected as in case of other taxes for general purposes, upon all the property of the State; and when the tax so levied is collected, the same shall be paid into and become a part of the general fund to reimburse such fund for the amounts appropriated to carry into effect the provisions of this act.

PUBLIC ACTS, 1895, No. 193.

AN ACT to prohibit and prevent adulteration, fraud, and deception in the manufacture and sale of articles of food and drink. (Approved May 22, 1895.)

No person shall adulterate food for sale. SECTION 1 (as amended by act No. 118, Public Acts, 1897). That no person shall within this State manufacture for sale, have in his possession with intent to sell, offer, or expose for sale, or sell, any article of food which is adulterated within the meaning of this act.

Food defined. SEC. 2. The term food, as used herein, shall include all articles used for food or drink, or intended to be eaten or drank by man, whether simple, mixed, or compound.

Adulteration defined. SEC. 3 (as amended by act No. 118, Public Acts, 1897). An article shall be deemed to be adulterated within the meaning of this act: First, If any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength, or purity; Second, If any inferior or cheaper substance or substances have been substituted wholly or in part for it; Third, If any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; Fourth, If it is an imitation of, or is sold under the name of, another article; Fifth, If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted, or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal; Sixth, If it is colored, coated, polished, or powdered whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; Seventh, If it contains any added substance or ingredient which is poisonous or injurious to health: *Provided*, That nothing in this act shall prevent the coloring of pure butter: *And provided* further, That the provisions of this act shall not

Articles labeled "mixture" or "compound" excepted. apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale bear the name and address of the manufacturer and be distinctly labeled under its own distinctive name, and in a manner so as to plainly and correctly show that it is a mixture or compound, and is not in violation with definitions fourth and seventh of this section.

Impure butter prohibited. SEC. 4. No person, by himself or his agents or servants, shall manufacture for sale or offer or expose for sale, or sell, as butter and the legitimate product of the dairy or creamery, any article not made exclusively of milk or cream, but into which the oil or fat of animals or any other oils not produced from milk enters as a component part, has been introduced to take the place of cream. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty nor more than five hundred dollars and the costs of prosecution, or by imprisonment in the county jail or the State House of Correction and Reformatory at Ionia for not less than ninety days nor more than two years, or by both such fine and imprisonment, in the discretion of the court, for each and every offense.

Imitation cheese prohibited. SEC. 5. No person shall manufacture, deal in, sell, offer or expose for sale or exchange any article or substance in the semblance of or in imitation of cheese made exclusively of unadulterated milk or cream, or both, into which any animal, intestinal, or offal fats or oils, or melted butter in any condition or state, or modification of the same, or oleaginous substances of any kind not produced from unadulterated milk or cream shall have been introduced. Whoever shall violate the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty nor more than five hundred dollars and the costs of prosecution, or by imprisonment in the county jail or the State House of Correction and Reformatory at Ionia for not less than ninety days nor more than two years, or by both such fine and imprisonment, in the discretion of the court, for each and every offense.

Full milk cheese to be branded as such. SEC. 6 (as amended by act 118, Public Acts, 1897). Every manufacturer of full milk cheese may put a brand upon each cheese, indicating "Full milk cheese," and no person shall use such a brand upon any cheese made from milk from which any of the cream has been taken. It shall be the duty of the proprietor of every cheese factory, creamery, or butter factory in the State where milk or cream is purchased of or contributed by three or more persons, to register the location of such cheese factory, creamery, or butter factory, and the name of its owner or manager with the dairy and food commissioner on or before the first day of October, A. D. eighteen hundred and ninety-seven, and on or before the first day of April in each year thereafter. Whoever violates any of the provisions of this section, in so far as it relates to registration, shall be deemed guilty of a misdemeanor, and for each and every offense shall be punished by a fine of not less than five dollars nor more than twenty-five dollars and the costs of prosecution, or by imprisonment in the county jail for not more than thirty days, or both.

Commissioner to issue brands for cheese. SEC. 7. The dairy and food commissioner shall procure and issue to the cheese manufacturers of the State, on proper application, which application shall be made on or before the first day of October, A. D. eighteen hundred and ninety-five, and on or before the first day of April in each year thereafter, and under such regulation as to the custody and use thereof as he may prescribe, a uniform stencil brand, bearing a suitable device or motto, and the words "Michigan full cream cheese." Every such brand shall be used on the outside of the cheese and upon the package containing the same, and shall bear a separate number for each separate factory. The said commissioner shall keep a book in which shall be registered the name, location, and number of each manufactory using the brand, and the name or names of persons at each factory authorized to use the same. No such brand shall be used on other than full cream cheese or packages containing the same. The commissioner shall receive a fee of one dollar for each registration, said fee to be paid by the party applying for the same, which amount shall be accounted for and used as a part of the fund appropriated for the enforcement of the laws of this State with which the dairy and food commissioner is charged.

False brands prohibited. SEC. 8. No person shall knowingly offer, sell, or expose for sale, in any package, cheese which is falsely branded or labeled.

* * * * *

Orders for future delivery of goods deemed a sale. SEC. 17. The taking of orders, or the making of agreements or contracts, by any person, firm, or corporation, or by any agent or representative thereof, for the

future delivery of any of the articles, products, goods, wares, or merchandise embraced within the provisions of this act, shall be deemed a sale within the meaning of this act.

False branding or labeling a misdemeanor. SEC. 18. Whoever shall falsely brand, mark, stencil, or label any article or product required by this act to be branded, marked, stenciled, or labeled, or shall remove, alter, deface, mutilate, obliterate, imitate, or counterfeit any brand, mark, stencil, or label so required, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than one hundred nor more than one thousand dollars and the costs of prosecution, or by imprisonment in the county jail or State House of Correction and Reformatory at Ionia for not less than six months nor more than three years, or by both such fine and imprisonment, in the discretion of the court, for each and every offense.

Penalties under this act. SEC. 19. Whoever shall do any of the acts or things prohibited, or wilfully neglect or refuse to do any of the acts or things enjoined by this act, or in any way violate any of the provisions, shall be deemed guilty of a misdemeanor, and, where no specific penalty is prescribed by this act, shall be punished by a fine of not less than one hundred dollars nor more than five hundred dollars, or by imprisonment in the county jail for a period of not less than thirty nor more than ninety days, or by both such fine and imprisonment, in the discretion of the court.

Duty of food commissioner. SEC. 20. It shall be the duty of the dairy and food commissioner of the State to investigate all complaints of violations of this act and take all steps necessary to its enforcement. It shall be the duty of all prosecuting officers of this State to prosecute to completion all suits brought under the provisions of this act upon the complaint of the commissioner or of any citizen. It shall be the duty of all food

Health officer to prosecute violations. inspectors in cities to examine all complaints made to them of violation of this act, and to render assistance in enforcing its provisions. It shall also be the duty of all health boards in cities and health officers in townships to take cognizance of and report or prosecute all violations of this act that may be brought to their notice, or they may have cognizance of, within their jurisdiction.

Repeal. SEC. 21. All acts and parts of acts inconsistent with this act are hereby repealed.

PUBLIC ACTS OF 1873, No. 26. (Howell's Annotated Statutes, 224.)

AN ACT to prevent and punish offenders for the adulteration of milk, and the products made therefrom, and to repeal an act entitled "An act to prevent the adulteration of milk, and to prevent the traffic in impure and unwholesome milk," approved March thirty-first, eighteen hundred and seventy-one. (Approved March 12, 1875.)

Sale of impure milk forbidden. SECTION 1. That whoever shall knowingly sell to any person or persons, or sell, deliver, or bring to be manufactured to any cheese or butter manufactory in this State, any milk diluted with water or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as "skimmed milk," or shall keep back any part of the milk known as "strippings," with intent to defraud, or shall knowingly sell milk the product of a sick or diseased animal or animals, or any milk produced from any cow fed upon the refuse of a distillery or of a brewery, or upon any substance deleterious to the

Impure butter and cheese. quality of the milk, or shall knowingly use any poisonous or any deleterious material in the manufacture of any cheese or butter, or shall knowingly sell or offer to sell any cheese or butter in the manufacture of which any poisonous or deleterious substance has been used, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined

Penalty. not less than ten dollars nor more than one hundred dollars, and may be committed to the county jail until such fine shall be paid: *Provided*, That such imprisonment shall not exceed ninety days: and shall be liable in double the amount of damages to the person or persons, firm, association, or corporation upon which such fraud shall have been committed. An act entitled "An act to prevent the adulteration of milk and to prevent the traffic in impure and unwholesome milk,"

Repealing clause. approved March thirty-first, eighteen hundred and seventy-one, is hereby repealed: *Provided*, "That any right accrued or forfeiture incurred under said act shall remain valid and binding, and may be enforced under said act, as if the same were not repealed."

PUBLIC ACTS, 1887, No. 246. (Howell's Annotated Statutes. 1690m-1690z.)

AN ACT to prevent the sale of impure, unwholesome, adulterated, or swill milk in the State of Michigan, and to provide for inspectors. (Approved June 25, 1887.)

Sale of impure milk forbidden. SECTION 1 (as amended by act No. 219, Public Acts 1889). That it shall be unlawful for any person, either by himself or agent, to sell or expose for sale within the State of Michigan any unwholesome, watered, or adulterated, or impure milk, or swill milk, or colostrum, or milk from cows kept upon garbage, swill, or any substance in a state of fermentation or putrefaction or other deleterious substances, or from cows kept in connection with any family in which there are infectious diseases. The addition of water or ice to the milk is hereby declared an adulteration.

Penalty. SEC. 2. Any person who shall violate any of the provisions of the preceding section shall be punished by a fine not to exceed one hundred dollars or [by] imprisonment not to exceed three months, or by both such fine and imprisonment, in the discretion of the court.

Milk inspection in Detroit. SEC. 3. It shall be the duty of the metropolitan police commissioners of the city of Detroit, by and with the consent and advice of the board of health of the city of Detroit, to appoint an inspector, who shall be a person of previous practical experience. Said inspector may be created captain, sergeant, or roundsman of the said police force of the city of Detroit, at the option of the board of metropolitan police commissioners.

Duties of inspector. SEC. 4. It shall be the duty of said inspector to personally view, so far as possible, all milk exposed for sale in said city, and to visit all dairy houses, barns, or stables in said city or the county of Wayne, to inspect the same, and the animals held therein, and to visit all places where milk is kept or exposed for sale in the city of Detroit, and to inspect and ascertain the condition of said milk. He may detail any patrolman of said

Patrolman to assist. city to assist him in the performance of any or all of the duties enjoined on him by this act: *Provided always*, That said inspector and any policeman so detailed shall always be subject to the provisions of the law establishing and governing the metropolitan police of said city.

Inspector to make complaints. SEC. 5 (as amended by act No. 219, Public Acts, 1889). It shall be the duty of said inspector or of his assistant, and of all other inspectors appointed under this act, to make complaint in writing before a police justice or justice of the peace, or other court having jurisdiction thereof, of every violation of this act coming to his knowledge.

Each sale a separate offense. SEC. 6. Each and every quantity of milk sold or exposed for sale contrary to the provisions of this act shall constitute a separate offense.

Hindrances of inspector a misdemeanor. SEC. 7. Any person who shall refuse to permit the said inspector, or his assistant (assistants), to perform his duty under this act, either by refusing him entrance to his premises or by concealing any milk, or by refusing to permit any milk or animal or premises wherein the animals are kept to be viewed and inspected as herein provided, or by in any manner hindering or resisting any said inspector or assistant inspector in the performance of his duty, shall be guilty of a misdemeanor and punished therefor.

Cities and villages may have milk inspectors. SEC. 8. Authority is hereby given the common council of any city, and the board of trustees or council of any village, to appoint an inspector of milk in any such city or village, and to fix their compensation, and when appointed the said inspectors of milk shall have all the powers as given by section four of this act, and shall perform all the duties required of inspectors of milk as provided herein, and such other powers and duties as may be conferred or imposed by the ordinances of said cities or villages.

Penalty for adulteration of milk. SEC. 9 (added by act No. 219, Public Acts, 1889). Whoever shall adulterate, by himself or by his servant or agent, or sell, exchange, or deliver, or have in his custody or possession with intent to sell or exchange the same, or exposes or offers for sale or exchange, adulterated milk or milk to which water or any foreign substances [substance] in any state of fermentation or putrefaction, or from sick or diseased cows, shall be guilty of a misdemeanor, and shall for every such offense be punished by a fine not exceeding one hundred dollars or by imprisonment in the county jail or the State House of Correction and Reformatory at Ionia, not exceeding three months.

Penalty for sale of skimmed milk as pure. SEC. 10 (added by act No. 219, Public Acts, 1889). Whoever shall adulterate, himself, or by his servant or agent, sell, exchange, or deliver, or have in his custody or possession with intent to sell or exchange the same, or exposes or offers for sale as pure milk any skimmed milk from which the cream or any part thereof has been removed, shall be guilty of a misdemeanor, and shall, for such offense, be punished by the penalty provided in the preceding section.

Vessels containing skimmed milk for sale to be labeled. SEC. 11 (added by act No. 219, Public Acts, 1889). Any dealer in milk who shall, by himself, servant, or agent, sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver the same, milk from which the cream or any part thereof has been removed, unless in a conspicuous place above the center upon the outside of every vessel, can, or package from which any such milk is sold, the words "Skimmed milk" are distinctly painted in letters not less than one inch in length, shall be guilty of a misdemeanor, and shall be punished by a fine not exceeding one hundred dollars or by imprisonment in the county jail or Detroit House of Correction not exceeding three months.

Pure and adulterated milk defined. SEC. 12 (added by act No. 219, Public Acts, 1889). If milk sold or offered for sale under the provisions of this act as pure milk is shown upon analysis by weight to contain more than eighty-seven and fifty one-hundredth percentum of watery fluid, or to contain less than twelve and fifty one-hundredths of milk solids, percentum, or less fat than three percentum, or if the specific gravity at 60 degrees Fahrenheit is not between 1 29-1000 to 1 33-1000, it shall be deemed to be adulterated. If milk sold or offered for sale under the provisions of this act as skimmed milk has a specific gravity at 60 degrees Fahrenheit less than 1.032, and greater than 1.037, it shall be deemed to be adulterated.

Manner of testing milk for adulterants. SEC. 13 (added by act No. 219, Public Acts, 1889). Whenever any inspector of milk has reason to believe that any milk found by him is adulterated, he shall take specimens thereof and test the same with such instrument or instruments as are used for such purposes, and he shall make an analysis thereof, showing total solids, the percentage of butter, the percentage of water, and the percentage of ash; and if the result of such test and analysis indicates that the milk has been adulterated or deprived of its cream, or any part thereof, the same shall be *prima facie* evidence of such adulteration in a prosecution under this act.

Selling skimmed or adulterated milk to factory; penalty. SEC. 14 (added by act No. 219, Public Acts, 1889). Any person who shall remove the cream or any part thereof from milk to be sold as pure milk to any manufactory in which milk is used as a material in the process of production, and any person who shall, in any manner, adulterate such milk, either by the addition of water or otherwise, shall be guilty of a misdemeanor, and shall, for every such offense, be punished by a fine not exceeding one hundred dollars, or by imprisonment in the county jail or Detroit House of Correction not exceeding ninety days.

PUBLIC ACTS OF 1897, No. 76.

AN ACT to prevent deception in the manufacture and sale of imitation butter. (Approved April 15, 1897.)

Imitations of butter prohibited. SECTION 1. That no person, by himself or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product, or compound made wholly or in part out of any fat, oil, or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream for the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter.

Penalty. SEC. 2. Whoever violates any of the provisions of section one of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than fifty dollars, nor more than five hundred dollars and the costs of prosecution, or by imprisonment in the county jail

or State House of Correction and Reformatory at Ionia, for not less than six months nor more than three years, or by both such fine and imprisonment in the discretion of the court, for each and every offense.

PUBLIC ACTS OF 1887, No. 166. (Howell's Annotated Statutes, 1887.)

AN ACT to regulate the sale and use of oleomargarine, butterine, and other articles and substances resembling butter, and to provide a penalty for the violation of this act. (Approved June 19, 1887.)

Butter imitations not to be sold as the genuine. SECTION 1. That any person who knowingly sells, or offers for sale, as butter, any oleomargarine, butterine, or other article or substance, resembling butter, and not made exclusively from milk or cream, and of which the oil or fat of animals not produced from milk is a component part, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined, for each offense, not less than twenty-five dollars nor more than two hundred dollars, and Penalty. by imprisonment in the county jail or State House of Correction and Reformatory at Ionia not less than ninety days and not exceeding one year, or by both such fine and imprisonment, in the discretion of the court.

Hotel keepers, etc., amenable to this act. SEC. 2. The proprietor or keeper of any hotel, restaurant, eating saloon, boarding house, or other place where food is furnished to persons paying for the same, who shall knowingly place upon the table, or use or permit to be used in the preparing of any food to be used in such place, or to be sold to any person, any oleomargarine, butterine, or other such substance resembling butter described in section one of this act, shall be deemed as selling and as offering for sale as butter, of such substance resembling butter, within the meaning and intent and contrary to the provisions of this act, and liable and subject to the penalties prescribed for such offense.

Presence of butter substitute evidence of guilt. SEC. 3. The presence of such oleomargarine, butterine, or other substance resembling butter, in any such place before mentioned where food is sold or furnished to persons paying for the same, shall be *prima facie* evidence in any court before which any person violating the provisions of this act may be brought for examination or trial, that such person has sold and offered for sale as butter, such substance resembling butter: *Provided, nevertheless,* That if the proprietor or keeper of such store, hotel, eating saloon, boarding house or other place hereinbefore mentioned, shall have placed on the outside door, and conspicuously hung in the center, and placed on the walls of any store or room where food is sold or furnished, a white placard on which is printed in black ink, in plain Roman letters of not less than three inches in length, and not less than two inches in width with the words, "Oleomargarine or butterine sold or used here," and shall at all times keep the same exposed in such conspicuous places as to be readily seen by any and all persons entering such store or room or rooms, he shall be deemed to have complied with the provisions of this act, and may use, sell, and offer for sale such oleomargarine, or butterine, or other substance resembling butter.

PUBLIC ACTS OF 1881, No. 34. (Howell's Annotated Statutes, 2245.)

AN ACT for the protection of dairymen, and to prevent deception in sales of butter. (Approved March 17, 1881.)

Packages containing butter substitutes to be branded or labeled SEC. 1. That every person who shall manufacture for sale, or who shall offer or expose for sale by the tub, firkin, box, or package, or any greater quantity, any article or substance in semblance of butter not the legitimate product of the dairy, and not made exclusively of milk or cream, but into which the oil or fat of animals not produced from milk enters as a component part, or into which melted butter, or any oil thereof, has been introduced to take the place of cream, shall distinctly and durably stamp, brand, or mark upon the top and also upon the side of every such tub, firkin, box, or package of such article or substance, the word "Oleomargarine," if such article or substance is composed in part of suet or tallow, or the word "Butterine," if such article or substance is composed in part of lard, where it can be plainly seen, in Roman letters which shall be burned on, or printed thereon in permanent black paint, in a straight line, and each letter shall be not less than one inch in length: and in case of retail sales of such articles or substance, in parcels, the seller shall in all cases sell, or offer, or expose the

same for sale from a tub, firkin, box, or package stamped, branded, or marked, as herein stated, and shall also deliver therewith to the purchaser a printed label bearing the plainly printed word "Oleomargarine," or "Butterine," as the same may be, with the name of the manufacturer in Roman letters not less than one-half inch in length, which shall be printed in a straight line: and every sale of such article or substance by tub, firkin, box, or package, or in any greater quantity, not so stamped, branded, or marked as "Oleomargarine" or "Butterine," as the same may be, and every sale of such article or substance at retail in parcels that shall not be sold from a tub, firkin, box, or package, so stamped, branded or marked, or without delivery of a label therewith as above stated, is declared to be unlawful and void, and no action upon any contract shall be maintained in any of the courts of this State to recover upon any contract for the sale of any such article or substance not so stamped, branded, marked, labeled, or sold.

Penalty. SEC. 2. Every person who shall sell, or offer, or expose for sale, or who shall cause or procure to be sold, offered, or exposed for sale, by the tub, firkin, box, or package, or in any greater quantity, any article or substance required by the first section of this act to be stamped, branded, or marked, that shall not be so stamped, branded, or marked, or in case of retail sales in parcels, every person who shall sell, or offer, or expose for sale, or who shall cause or procure to be sold, offered, or exposed for sale, any article or substance required by the first section of this act to be sold, offered, or exposed for such sale from a tub, firkin, box, or package, stamped, branded, or marked and labeled as therein stated, contrary to the provisions of said section, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than ten nor more than one hundred dollars and the costs of prosecution, or by imprisonment in the county jail for not less than five nor more than thirty days, or by both such fine and imprisonment for each and every offense.

PUBLIC ACTS OF 1891, No. 45.

AN ACT to prohibit the use of oleomargarine, butterine, or any other substitute for butter in any of the public institutions of this State, and to provide the punishment therefor. (Approved April 29, 1891.)

Substitutes for butter in State institutions prohibited.

SECTION 1. That the use of oleomargarine, butterine, or any other substitute for butter, in any of the public institutions of this State

be, and the same is hereby, prohibited.

Penalty. SEC. 2. Any warden, superintendent, or other officer of any such institution, who shall knowingly violate the provisions of section one of this act, or shall knowingly permit the same to be violated, shall be deemed guilty of a misdemeanor and every violation shall constitute a separate offense, and on conviction thereof shall be punished by a fine of not less than twenty-five, nor more than one hundred dollars, together with costs of prosecution, or by imprisonment in the county jail of the county in which said institution is situated, not exceeding ninety days, or both such fine and imprisonment, at the discretion of the court.

MINNESOTA.¹

GENERAL LAWS of 1885, Chapter 149, as amended and supplemented by Chapter 140, General Laws of 1887 and Chapter 247, General Laws of 1889.

Sale of diseased or adulterated milk prohibited. SECTION 1 (as amended by section 1, chapter 119, General Laws of 1897). No person or persons shall sell or exchange, or expose for sale or exchange, any unclean, unhealthy, adulterated, or unwholesome milk, or shall offer for sale any article of food made from the same, or cream from the same.

Skim milk cheese permitted. This provision shall not apply to pure skim milk cheese, made from milk which is pure, healthy, wholesome, and unadulterated, except by skimming.

Penalty. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than ten dollars nor more than fifty dollars, or by imprisonment of not less than one month nor more than three months.

¹ Published in "Minnesota State Dairy and Food Laws, as enacted and amended by the legislatures of 1891, 1893, 1895, and 1897," by the commissioner.

Care and feed of cows. SEC. 2 (as amended by section 2, chapter 119, General Laws of 1897). No person shall keep cows for the production of milk for market or for sale or exchange, or for manufacturing the same or cream from the same into articles of food, in a crowded or unhealthy condition, or feed the cows on food that is unhealthy or that produces impure, unhealthy, diseased, or unwholesome milk.

Unwholesome milk or cream prohibited. No person shall manufacture from impure, unhealthy, diseased, or unwholesome milk, or of cream from the same, any article of food.

Penalty. Whoever violates the provisions of this section is guilty of a misdemeanor, and shall be punished by a fine of not less than twenty-five dollars nor more than fifty dollars, or by imprisonment of not less than one month nor more than three months.

Delivery of impure milk to factories prohibited. SEC. 3 (as amended by section 3, chapter 119, General Laws of 1897). No person or persons shall sell, supply, or bring, to be manufactured, to any butter

or cheese manufactory any milk diluted with water, or any unclean, impure, unhealthy, adulterated, or unwholesome milk, or milk from which any cream has been taken (except pure skim milk to skim cheese factories), or shall keep back any part of the milk commonly known as "strippings," or shall bring or supply milk to any butter or cheese manufactory that is sour (except pure skim milk to

skim cheese factories). No butter or cheese manufactory, except those who buy all the milk they use, shall use for their own benefit or allow any of their employees or any other person to use, or the product thereof brought to said manufacturers, without the consent of the owners thereof.

Accounts open to inspection. Every butter or cheese manufacturer, except those who buy all the milk they use, shall keep a correct account of all the milk daily received, and of the number of pounds and packages of butter, the number and aggregate weight of cheese made each day, the number of packages of cheese and butter disposed of; which shall be open to inspection to any person who delivers milk to such manufacturer. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and shall be punished for each offense by a fine of not less than ten dollars or more than fifty dollars, or by imprisonment of thirty days.

Substitutes for butter and cheese prohibited. SEC. 4. No person shall manufacture out of any oleaginous substance or substances, or any compound of the same, or any other compound, other than that produced from unadulterated milk, or of cream from the same, any article designed to take the place of butter or cheese produced from pure, unadulterated milk, or cream from the same, or shall sell or offer for sale the same as an article of food. This shall not apply to pure skim milk cheese made from pure skim milk. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and be punished by a fine of not less than one hundred dollars or more than five hundred dollars, or not less than six months' or more than one year's imprisonment, or by both such fine and imprisonment for the first offense, and by imprisonment for one year for each subsequent offense.

Imitation butter and cheese prohibited. SEC. 5. No person, by himself or his agents or servants, shall render or manufacture out of any animal fat, or animal or vegetable oils, not produced from unadulterated milk or cream from the same, or any article or product in imitation or semblance of, or designed to take the place of, natural butter or cheese produced from pure unadulterated milk or cream of the same, nor shall he or they mix, compound with, or add to milk, cream, or butter any acids or other deleterious substance, or any animal fats or animal or vegetable oils, not produced from milk or cream with designs or intent to render, make, or produce any article or substance for human food in imitation or semblance of natural butter or cheese, nor shall he sell, keep for sale, or offer for sale any article, substance, or compound made, manufactured, or produced in violation of the provisions of this section, whether such article, substance, or compound shall be made or produced in this State or in any other State or country. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and be punished by a fine of not less than one hundred dollars nor more than five hundred dollars, or less than six months' or more than one year's imprisonment for the first offense and by imprisonment for one year for each subsequent offense.

Nothing in this section shall impair the provisions of section four of this act.

SEC. 6. No person shall manufacture, mix, or compound with, or add to natural milk, cream, or butter any animal fats, or animal or vegetable oils, nor shall he make or manufacture any oleaginous substances not produced from milk or cream with intent to sell the same for butter or cheese made from unadulterated milk or cream, or have the same in his possession, or offer the same for sale with such intent, nor shall any article, or substance, or compound so made or produced be sold for butter or cheese, the product of the dairy. If any person shall coat,

imitations not to be colored to resemble powder, or color with annatto, or any coloring matter whatever, butterine or oleomargarine, or butter or cheese.

any compounds of the same, or any products or manufacture made in whole or in part from animal fats, or animal or vegetable oils, not produced from unadulterated milk or cream, whereby the said product, manufacture, or compound shall be made to resemble butter or cheese, the product of the dairy, or shall have the same in his possession, or sell or offer for sale, or have in his possession, any of said products which shall be coated or colored in semblance of or to resemble butter or cheese, it shall be *prima facie* evidence of an intent to sell the same for butter or cheese, the product of the dairy. Whoever violates any of the provisions of this section shall be deemed guilty of a misdemeanor, and punished by a fine of not less than one hundred dollars nor more than one thousand dollars.

This section shall not be construed to impair or affect the prohibition of sections four and five of this act.

False brands. **SEC. 7** (as amended by section 4, chapter 119, General Laws of 1897). No person shall offer, sell, or expose for sale butter or cheese branded or labeled with a false brand or label as to the quality of the article or to the county or State in which the article is made.

The Minnesota State dairy and food commissioner is hereby authorized and directed to procure and issue to the cheese manufacturers of the State, and under such regulations as to the custody and use thereof as he may prescribe, a uniform stencil brand bearing a suitable device or motto and the words "Minnesota State full cream cheese." Every brand

issued shall be used upon the outside of the cheese, and also upon the package containing the same, and shall be a different number for each separate manufactory, and the commissioner shall keep a book in which shall be registered the name, location, and number of each manufactory using the said brand, and the name or names of the persons at each manufactory authorized to use the same. It shall be unlawful to use or permit such stencil brand to be used upon any other than full cream cheese, or packages containing the same.

Cheese standard; penalty. Minnesota State full cream cheese, of which there be less than forty-five per centum of fats to total solids, shall be deemed for the purpose of this act to be adulterated. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and for each and every cheese or package so falsely branded shall be punished by a fine of not less than twenty-five dollars or more than fifty dollars or imprisonment of not less than fifteen days or more than thirty days.

Dairy commissioner; term of office; salary. **SEC. 8.** The governor shall appoint a commissioner, who shall be known as the State dairy and food commissioner, who shall be a citizen of this State, and who shall hold his office for a term of two years, or until his successor is appointed, and shall receive a salary of eighteen hundred dollars per annum and his necessary expenses incurred in the discharge of his duties under this act, and shall be charged, under the direction of the governor, with the enforcement of the various provisions thereof. Said commissioner may be removed from office at the pleasure of the governor and his successor appointed as above provided for. The said

Assistants and their compensation. commissioner is hereby authorized and empowered to appoint a secretary, whose salary shall be twelve hundred dollars per year, and such assistant commissioners, and to employ such experts, chemists, agents, and such counsel as may be deemed by him necessary for the proper enforcement of this law, their compensation to be fixed by the commissioner. The sum of fifteen thousand dollars annually is hereby

Appropriation. appropriated, to be paid for such purposes out of any moneys in the treasury not otherwise appropriated. All charges, accounts, and expenses authorized by this act shall be paid by the treasurer of the State upon the warrant of the State auditor. The entire expenses of said commissioner shall not exceed the sum appropriated for the purpose of this act. The said commissioner shall make bien-

Commissioner's report. nial reports to the legislature, not later than the fifteenth day of January, of his work and proceedings, and shall report in detail the number of assistant commissioners, experts, chemists, agents, and counsel he has employed, with their expenses and disbursements. The said commissioner shall have a room in the capitol, to be set apart for his use by the governor. This section shall not affect the tenure of office of the present commissioner, nor to be construed to impair or affect any of the provisions in section seven of chapter one hundred and forty-nine of the law of eighteen hundred and eighty-five, except in the sum of money appropriated.

Powers for inspection, etc. SEC. 9. The said commissioner and assistant commissioners, and such experts, chemists, agents, and counsel as they shall duly authorize for the purpose, shall have access, ingress, and egress to all places of business, factories, farms, buildings, carriages, cars, vessels, and cans used in the manufacture and sale of any dairy product or any imitation thereof. They also shall have power and authority to open any package, can, or vessel containing such articles which may be manufactured, sold, or exposed for sale in violation of the provisions of this act, and may inspect the contents therein and may take samples therefrom for analysis.

All clerks, bookkeepers, express agents, railroad officials, employees, or common carriers shall render to them all the assistance in their power, when so requested, in tracing, finding, or discovering the presence of any prohibited article named in this act.

Penalty for interference. Any refusal or neglect on the part of such clerks, bookkeepers, express agents, railroad officials, employees, or common carriers to render such friendly aid shall be deemed a misdemeanor, and be punished by a fine of not less than fifty dollars nor more than one hundred dollars for each and every offense.

Reports from creameries, dairies, etc. SEC. 10. The commissioner shall provide blanks, which shall be furnished to all proprietors or managers of creameries, cheese factories, or milk dairies that ship milk to the cities, and all the venders or peddlers of milk in the cities, within the State, for the purpose of making a report of the amount of milk and dairy goods handled, and all owners or managers of such creameries and cheese factories shall, on the first day of November of each year, send to the dairy and food commissioner a full and accurate report of the amount of business done during the year, and all milk dairies, milk venders, or milk peddlers shall send to the State dairy and food commissioner quarterly reports of all the business done by each and every such person, firm, or company in handling dairy products during the last three months past, as designated under the different headings of such printed blanks.

Any neglect or failure or false statement on the part of any proprietor or manager of such creamery, cheese factory, dairy, or any milk vender or milk peddler, shall be considered a misdemeanor and be punished by a fine of not less than ten dollars nor more than one hundred dollars.

Cream standard; penalty. SEC. 11. No person shall sell or offer for sale any cream taken from impure or diseased milk, or cream that contains less than twenty per centum of fat. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than ten dollars nor more than one hundred dollars.

Milk standard. SEC. 12 (as amended by section 6, chapter 119, General Laws of 1897). In all prosecutions under this act relating to the sale and manufacture of unclean, impure, unhealthy, adulterated, or unwholesome milk, if the milk be shown to contain more than eighty-seven per centum of water fluids or less than thirteen per centum milk solids, of which less than three and one-half per centum shall be fat, shall be declared adulterated, and milk drawn from cows within fifteen days before and four days after parturition, or from animals fed on distillery waste or brewers' malt, or any unhealthy food whatever, shall be deemed, for the purpose of this act, to be unclean, impure, unhealthy, and unwholesome milk. The penalties for any violation of this section are the same as those of section two of this act.

Ensilage permitted. This section shall not prevent the feeding of ensilage from silos. **Skim-milk cans to be marked.** No person shall sell or expose for sale in any store or place of business, or on any wagon or other vehicle used in transporting or selling, milk from which cream has been removed, or milk commonly called "skimmed milk," without first marking the can or package containing said milk with the words "Skimmed milk," in large, plain, black letters, each

letter being at least one inch high and one-half inch wide. Said words to be on top or the side of said can or package, where they can be easily seen.

Penalty. Whoever violates the provisions of this section shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than twenty-five nor more than fifty dollars for each and every offense. In default of payment, by imprisonment in the county jail of not less than thirty days.

Milk peddler's license. SEC. 13 (as amended by section 5, chapter 119, General Laws of 1897). Every person who conveys milk in carriages, carts, or otherwise, for the purpose of selling the same in any city or town of one thousand inhabitants or more, in the State of Minnesota, shall annually, on the first day of May, or within thirty days thereafter, be licensed by the State dairy and food commissioner to sell milk within the limits of said city or town, and shall pay to the said State dairy and food commissioner the sum of one dollar each to the use of said dairy and food commission. Licenses shall be used only in the names of the owners of carriages, carts, and other vehicles, and shall, for the purpose of this act, be conclusive evidence of ownership. No license shall be sold, assigned, or transferred.

Each license shall record the name, residence, place of business, number of carriages, carts, or other vehicles used, the name and residence of every driver, or other persons engaged in selling said milk, and the number of the license. Each licensee shall, before engaging in the sale of milk, cause his name, the number of his license, and his place of business to be legibly placed on each outer side of all carriages, carts, or other vehicles used by him in the conveyance and sale of milk, and he shall report to the State dairy and food commissioner any change of driver or other person employed by him, which may occur during the term of his license. Whoever, without being first licensed under the provisions of this section, sells

Penalty. milk or exposes it for sale from carriages, carts, or other vehicles, or has it in his custody or possession with intent to sell, and whoever violates any of the provisions of this section, shall be punished by a fine of not less than ten dollars nor more than fifty dollars, or by imprisonment in the county jail for not less than thirty days.

Milk dealers' license. SEC. 14. Every person, before selling milk, or offering it for sale, in a store, booth stand, or market place, in the respective towns or cities, as designated in this act, shall procure a license from the State dairy and food commissioner, or his authorized agents, and shall pay to said commissioner or his agents the sum of one dollar. And whoever neglects to procure

Penalty. said license shall be deemed guilty of a misdemeanor, and shall be punished for each offense by a fine not exceeding twenty-five dollars.

Disposition of money received. SEC. 15. That all moneys received as license fees or from the sale of any and all goods confiscated by the State dairy and food commissioner under said act shall be received and disbursed the same as money appropriated for the use of said dairy and food commission.

Possession evidence of guilt. SEC. 16. The having in possession by any person or firm of any articles or substances prohibited by this act shall be considered *prima facie* evidence that the same is kept by such person or firm in violation of the provisions of this act, and the commissioner shall be authorized to seize upon and take possession of such articles or substances, and upon the order of any court which has jurisdiction under this act he shall sell the same for any purpose other than to be used for food, the proceeds to be placed to the credit of the State dairy and food commissioner's fund.

Skim cheese defined. SEC. 17 (as enacted by section 7, chapter 119, General Laws of 1897; section 17 of chapter 247, General Laws 1889, repealed).

All cheese which contains less than forty-five per centum of fats to total solids is hereby declared to be "skim cheese;" and it is hereby required and

Brand required. directed that the same shall be marked with a stencil or brand with the words "Skim cheese" in plain black letters not less than one and one-half inches in length and of proportionate width upon the circumference of the cheese and upon the outer surface of the box or package containing the same; and any dealer or trader who, by himself or as the servant or agent of another person, has in his possession with intent to sell, offers or exposes for sale, or sells any skim cheese, as hereinbefore defined, which is not stenciled or branded, as hereinbefore required and directed, shall be deemed to be guilty of a misdemeanor and shall be subject to the penalties provided in this section.

Placard to be displayed where skim cheese is sold. Every dealer or trader who offers or exposes for sale or sells skim cheese, as hereinbefore defined, shall cause to be kept continuously posted in a conspicuous position upon the walls of the room wherein such skim

cheese is offered or exposed for sale or sold cards upon the face of which is distinctly and legibly printed in the English language and in letters of sufficient size to be visible from all parts of the room the words "Skim cheese sold here."

Penalty. Any person or firm violating any of the provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction shall be subject to a fine of not less than twenty-five dollars nor more than one hundred dollars, or to imprisonment for not less than thirty nor more than ninety days for each offense: *Provided*, That nothing contained in this section shall be deemed to conflict with section six of said chapter two hundred and forty-seven.

SEC. 18. In all prosecutions under this act the cost thereof shall be paid in the manner now provided by law and the rest placed to the credit of the State dairy and food commissioners' fund.

GENERAL LAWS OF 1891, Chapter 11.

AN ACT relating to the sale of imitation butter. (Approved April 21, 1891.)

Butter substitutes shall be colored bright pink; penalty.

pound made in imitation of butter, or as a substitute for butter, and not wholly made from milk or cream, and that is of any other color than bright pink, shall be subject to the payment of a penalty of fifty dollars, and for a second and each subsequent offense a penalty of one hundred dollars, to be recovered with costs in any court in this State of competent jurisdiction.

Analyses of samples. **SEC. 2.** Samples or specimens of any articles in imitation of butter, suspected of being of a spurious character, shall be analyzed or otherwise satisfactorily tested as to color and compounds; and a certificate of the analysis, sworn to by the analyzer, shall be admissible as evidence in all prosecutions under this act.

Possession evidence of guilt. **SEC. 3.** The having in possession by any person or firm of any articles or substance prohibited by this act shall be considered *prima facie* evidence that the same is kept by such person or firm in violation of the provisions of this act, and the State dairy and food commissioner shall be authorized to seize upon and take possession of such articles or substance, and upon the order of any court which has jurisdiction under this act he shall sell the same for any purpose other than to be used for food. The proceeds derived from fines and the sale of imitation butter shall be paid

Proceeds from fines and sales of imitation butter.

into the State treasury to be placed to the credit of the State dairy and food commissioner's fund.

Butter defined. **SEC. 4.** For the purpose of this act the term butter shall be understood to mean the product usually known by that name, and which is manufactured exclusively from milk or cream, or both.

GENERAL LAWS OF 1887, Chapter 141.

AN ACT to prevent fraud in dairy products and to preserve health.

"Quinness patent" and other adulterated butter to be marked.

ingredients under what is known as the "Quinness patent" or process, or any other similar process, whereby the casein of milk and other ingredients are made to imitate and resemble genuine butter made from cream, shall stamp each package of the same on the top and sides with lamplblack and oil the words "Patent butter" in letters at least one-fourth of an inch wide and one-half of an inch long. **Penalty.** Whoever violates the provisions of this section is guilty of a misdemeanor, and shall be punished for each offense by a fine of not less than twenty-five dollars nor more than one hundred dollars.

Printed card to purchaser. **SEC. 2.** Whoever sells or offers for sale any imitation or patent butter, as described in section one of this act, shall give to each purchaser of said goods a printed card stating correctly the different ingredients contained in the said compound.

Penalty. Whoever violates the provisions of this section is guilty of a misdemeanor, and shall be punished for each offense by a fine of not less than twenty-five dollars nor more than one hundred dollars.

GENERAL LAWS OF 1886, Chapter 202.

AN ACT to preserve the public health by requiring dealers in certain cases to empty and wash cans, bottles, and vessels used in transporting milk or cream. (Approved April 25, 1886.)

Milk vessels from trains and boats to be cleaned. SECTION 1. Any person or persons, firm or corporation who receives any milk or cream, in cans, bottles, or vessels, which has been transported over any railroad or boat line, where such cans, bottles, or vessels are to be returned, shall cause the said cans, bottles, or vessels to be emptied before the said milk or cream contained therein shall become sour, and shall cause the said cans, bottles, and vessels to be immediately washed and thoroughly cleansed and aired.

Penalty. SEC. 2. Whoever violates any of the provisions of this act shall be deemed guilty of a misdemeanor, and shall be punished by a fine of not less than twenty-five dollars or more than fifty dollars, or by imprisonment of not less than fifteen or more than thirty days for the first offense, and by imprisonment of sixty days for the second and each subsequent offense.

Powers of State dairy commissioner and his assistants. SEC. 3. It shall be the duty of the State dairy and food commissioner and his assistants, experts, chemists, and agents by him appointed, to enforce the provisions of this act.

Disposition of fines. SEC. 4. In all prosecutions under this act the costs thereof shall be paid in the manner now provided by law; and such fines shall be paid into the State treasury and placed to the credit of the State dairy and food commissioner's fund.

In effect. SEC. 5. This act shall take effect and be in force from and after its passage.

GENERAL LAWS OF 1886, Chapter 203.

AN ACT relating to the inspection of milk and of dairies and dairy herds, and to provide for the licensing and regulation of the sale of milk in cities. (Approved April 26, 1886.)

Dairy inspection. SECTION 1. The city council of any city may by ordinance provide for the inspection of milk and of dairies and of dairy herds kept for the production of milk within its limits, and issue licenses, for which no fee shall be charged, for the sale of milk within its limits and regulate the same, and may authorize and empower the board of health to enforce all laws and ordinances relating to the production and sale of milk and the inspection of dairies and dairy herds producing milk for sale or consumption within such city, and to appoint inspectors, experts, etc. such inspectors, experts, and chemists as are necessary for the proper enforcement of such laws and ordinances, their compensation to be fixed by the city council; and such inspectors, experts, and chemists shall be possessed of such necessary power within the limits of such city as shall be prescribed by ordinance, but no such ordinance shall conflict with any law of this State.

SEC. 2. Nothing in this act contained shall affect or interfere with any of the powers and duties conferred upon the State dairy and food commissioner or his deputies and agents by any law of this State.

In effect. SEC. 3. This act shall take effect and be in force from and after its passage.

MISSISSIPPI.

LAWS OF 1882, Chapter 50.

AN ACT to regulate the sale of oleomargarine and to promote the public health. (Approved March 9, 1882.)

Sale of oleomargarine, etc.; brand required. SECTION 1. That every person dealing in oleomargarine, or any other similarly manufactured butter, in this State, before offering the same for sale, shall distinctly and plainly mark or brand each package or parcel oleomargarine, or with whatever name it may be known, and shall offer and sell same by and according to its mark or brand.

Privilege tax of \$50. SEC. 2. That every such person, before offering for sale the article of butter named in section one of this act, shall pay a privilege tax of fifty dollars, and any person selling or offering for sale the same,

before complying with the provisions of this act, upon conviction before a justice of the peace, shall pay a fine of not less than twenty-five nor more than one hundred dollars for each and every offense, the same to be paid into the county treasury.

effect. SEC. 3. That this act take effect and be in force from and after its passage.

PRIVILEGE TAXES and other revenue laws in force 1896, chapter 5.

AN ACT creating privilege taxes on certain industries in Mississippi, and repealing all laws in conflict with same.

SECTION 1. That a tax on privileges is levied as follows:

* * * * *
Oleomargarine tax. On each vender of oleomargarine or similar manufactured butters, five dollars. And this shall apply even though the party has paid a tax as other dealers.
* * * * *

ANNOTATED CODE OF 1892.

confining or milking the cow of another. SECTION 1187 (2912). Any person who shall milk the cow of another, knowingly, without his consent, or who shall pen or confine by any means any milch cow, or the calf of any such cow, not his own, with intent to procure milk from such cow, without the consent of the owner, shall, on conviction, be fined not more than one hundred dollars, or by imprisonment in the county jail not more than three months, or both; and proof that anyone penned or confined any cow or her calf not his own shall be deemed prima facie evidence of an intent to procure milk in violation of this act.

MISSOURI.

LAWS OF 1891, page 163.

AN ACT to empower cities and towns, by ordinance, to license and regulate milk dairies and the sale of milk, and provide for the inspection thereof, and to repeal an act entitled "An act to prevent the adulteration of milk and cream in all cities that now have or may hereafter have a population of three hundred thousand inhabitants or over," approved June 14, 1889. (Approved April 18, 1891.)

Power of cities and towns over dairies, etc. SECTION 1. All cities and towns in the State shall have power, by ordinance, to license and regulate milk dairies and the sale of milk, and provide for the inspection thereof.

Repealing clause. SEC. 2. An act entitled "An act to prevent the adulteration of milk and cream in all cities that now have, or may hereafter have, a population of three hundred thousand inhabitants or over," approved June 14, 1889, and incorporated in the Revised Statutes of Missouri for A. D. 1889, as sections 5658 to 5670, inclusive, article 4, chapter 87, is hereby repealed.

LAWS OF 1897, page 104.

AN ACT requiring the branding or labeling of skim-milk cheese when offered for sale. (Approved March 24, 1897.)

Cheese not made from pure milk to be branded. SECTION 1. No person or persons, corporation, company, or other association or congregation of individuals shall manufacture, sell, or offer for sale, directly or indirectly, at retail or at wholesale in this State any article to be known or denominated cheese not made from pure cream or unskimmed milk or cream of the milk, unless such person or persons, corporation, company, or association of individuals manufacturing the same, or offering the same for sale, or selling the same, shall brand or label such cheese or article so offered for sale denominated a cheese, with black letters not less than one inch in length, in a conspicuous place and of large size, in the English language, as follows: "Skimmed-milk cheese," or with the words "Not full-cream cheese," giving the true name of such article called cheese so manufactured or offered for sale, clearly and indelibly branded, marked, or labeled thereon, so that the same can be distinctly read and fully comprehended, at all stores or places or factories where the same may be offered for sale.

Full-cream cheese defined. SEC. 2. All cheese manufactured, sold, or offered for sale in this State at retail or wholesale made from milk or cream of same, which tests not less than three per cent of butter fat, shall be deemed to be a full-cream cheese; and all cheese manufactured, sold, or offered for sale at any place or in any manner by any person or persons in this State at retail or wholesale made from milk or cream of same testing less than three per cent of butter fat, shall be deemed "skimmed-milk cheese," or cheese not made from pure unskimmed, unadulterated milk or cream of same.

Penalty. SEC. 3. Any person or persons who shall violate any of the provisions of sections 1 or 2 of this act shall be deemed guilty of a misdemeanor, and shall, on conviction thereof in any court of competent jurisdiction, be confined in the county jail not exceeding one year, or fined not less than \$10 nor exceeding \$500, or both.

Shippers must label. SEC. 4. No person, by himself or another, shall ship, consign, or forward by any common carrier, whether public or private, any substance designed to be used as a cheese not made from pure unskimmed milk, or cream of the same, testing at least three per cent butter fat, unless such cheese is marked or labeled "Skimmed-milk cheese," or with the words "Not full-cream cheese," labeled thereon: *Provided*, That this act shall not apply to any goods in transit between foreign States across the State of Missouri. Any person violating this section shall be deemed guilty of a misdemeanor, and, upon conviction, shall be fined a sum not less than \$10 nor more than \$500.

No action for sale. SEC. 5. No action can be maintained on account of any sale or other contract made with the manufacturer or person offering any cheese for sale, in violation of or with intent to violate this act, by or through any person who is knowingly a party to such wrongful sale, or other contract for the sale of unbranded skimmed-milk cheese or cheese not full-cream cheese.

Removing marks; penalty. SEC. 6. Whoever shall efface, erase, cancel, or remove any marks or label on any such article or cheese, provided for by this act, with intent to mislead, deceive, or to violate any of the provisions of this act, shall be deemed guilty of a misdemeanor, and, upon a conviction, be fined in a sum not less than \$50 or more than \$500.

Board of agriculture to enforce. SEC. 7. The State board of agriculture shall be and is hereby charged with the enforcement of this act: *Provided*, That all fines collected under the provisions of this act shall be covered into the State treasury. Action under this act may be brought by information or indictment in any court of competent jurisdiction.

Repealing clause. SEC. 8. All acts and parts of acts inconsistent with this act are hereby repealed.

REVISED STATUTES OF 1880.¹

Substitutes for butter and cheese to be marked. SECTION 3885. Whoever manufactures out of any oleaginous substances, or any compounds of the same, resembling butter in appearance, manufactured from cattle fat or hog fat, or such substances heretofore known as oleomargarine, oleo, oleomargarine oil, butterine, lardine, suine and neutral, all lard extracts and tallow extracts, and all mixtures and compounds of tallow, beef fat, suet, lard, lard oil, vegetable oil, annatto and other coloring matter, intestinal fat and offal fat, other than that produced from unadulterated milk, or cream from the same, any article designed to take the place of butter or cheese, produced from pure, unadulterated milk, or cream of the same, or any article made in imitation of butter, or when so made, calculated, or intended to be sold as butter or for butter, unless said manufacturers shall pack said imitation substitute in firkins, tubs, or wooden or paper packages, with the true name of said imitation substitute clearly and indelibly branded, marked or labeled thereon, or whoever shall sell or offer for sale the same as an article of food, unless said imitation substitute is properly packed in firkins, tubs, or wooden or paper packages, with the true name of said imitation substitute clearly and indelibly branded, marked, or labeled thereon, shall be guilty of a misdemeanor, and shall on conviction thereof be confined in the county jail not exceeding one year, or fined not exceeding one thousand dollars, or both.

¹ Section 3885—Revised Statutes 1879, section 1590; Amended Laws 1887, page 173. Section 3886—Laws 1886, page 149.

Hotels, etc., to give notice of use of oleomargarine, etc.

SEC. 3886. Any hotel or boarding-house keeper in this State who shall set before his guests at any meal any compound resembling butter in appearance, manufactured from cattle fat or hog fat, or such other articles, known to the trade as oleomargarine and shall not clearly and legibly mark the vessel in which such compound is served with the words "Oleomargarine," or "Impure butter" shall be deemed guilty of a misdemeanor, and upon conviction shall be fined in a sum of not less than one hundred nor more than five hundred dollars.

LAWS OF 1895, page 26.

AN ACT prohibiting the coloring yellow of any substance designed to be used as a substitute for butter; to prohibit the manufacture, sale, keeping for sale and fraudulent use of substances designed as imitation butter; to regulate the manufacture, sale, and keeping for sale, of any substance designed to be used as a substitute for butter, and making an appropriation for carrying out the provisions of this act. (Approved April 19, 1895.)

Imitation butter defined. SECTION 1. That for the purpose of this act, every article, substitute or compound, other than that produced from pure milk, or cream from the same, made in the semblance of butter and designed to be used as a substitute for butter made from pure milk, or cream from the same, is hereby declared to be imitation butter.

Coloring prohibited. SEC. 2. No person shall combine any animal fat or vegetable oil or other substance with butter, or combine therewith or with animal fat or vegetable oil or combination of the two, or with either one, any other substance or substances whatever, any annatto or compound of the same, or any other substance or substances, for the purpose or with the effect of imparting thereto a yellow color, or any shade of yellow, so that such substitute shall resemble yellow or any shade of genuine yellow butter, nor introduce any such coloring matter or such substance or substances into any of the articles of which the same is composed: *Provided*, Nothing in this act shall be construed to prohibit the use of salt and harmless coloring matter for coloring the substitutes for butter manufactured for export or sale outside the State. No person shall, by himself, his agents, or employees, produce or manufacture any substance in imitation or semblance of natural butter, nor sell, nor keep for sale, nor offer for sale, any imitation butter made or manufactured, compounded or produced in violation of this section, whether such imitation butter shall be made or produced in this State or elsewhere. This section shall not be construed to prohibit the manufacture and sale, under the regulations hereinafter provided, of substances designed to be used as a substitute for butter, and not manufactured or colored as herein prohibited.

Substitutes to be marked. SEC. 3. Every person who lawfully manufactures any substance designed to be used as a substitute for butter shall mark, by branding, stamping or stenciling upon the top and side of each tub, firkin, box or other package in which such article shall be kept, and in which it shall be removed from the place where it is produced, in a clean and durable manner, in the English language, the words, "Substitute for butter," in printed letters, in plain Roman type, each of which shall not be less than one inch in length and one-half inch in width.

Transportation of substitutes. SEC. 4. No person, by himself or another, shall ship, consign, or forward by any common carrier, whether public or private, any substance designed to be used as a substitute for butter, and no carrier shall knowingly receive the same for the purpose of forwarding or transporting, unless it shall be manufactured and marked as provided in the preceding section of this act, and unless it be consigned by the carrier and receipted for by its true name: *Provided*, That this act shall not apply to any goods in transit between foreign States across the State of Missouri.

Possession of unmarked substitutes. SEC. 5. No person shall have in his possession or under his control, any substance designed to be used as a substitute for butter, unless the tub, firkin, box, or other package containing the same be clearly and durably marked, as provided by section 4 of this act: *Provided*, That this section shall not be deemed to apply to persons who have the same in their possession for the actual consumption of themselves and family. Every person having in possession or control of any substance designed to be used as a substitute for butter, which is not marked as required by the provisions of this act, shall be presumed to have known during the time of such possession or control, the true character and name, as fixed by this act, of such product.

Sale as butter prohibited. SEC. 6. No person, by himself or another, shall sell or offer for sale any substance designed to be used for a substitute for butter under the name of or under the pretense that the same is butter.

Penalty. SEC. 7. Whoever shall violate any of the provisions of sections 2, 3, 4, 5, or 6 of this act shall, for the first offense, be punished by a fine not less than fifty dollars nor more than one hundred dollars, or by imprisonment not exceeding thirty days, and for each subsequent offense by a fine of not less than two hundred and fifty dollars nor more than five hundred dollars, or by imprisonment in the county jail not less than thirty days nor more than six months, or by both such fine and imprisonment, in the discretion of the court.

Evidence. SEC. 8. Whoever shall have possession or control of any imitation butter, or any substance designed to be used as a substitute for butter, contrary to the provisions of this act, shall be construed to have possession of property with intent to use it as a means of committing a public offense: *Provided*, That it shall be the duty of the officer who serves a search warrant issued for imitation butter, or any substance designed to be used as a substitute for butter, to deliver to the State board of agriculture, or to any person by said board authorized, in writing,

Samples for analysis. to receive the same, a perfect sample of each article seized by virtue of such warrant, for the purpose of having the same analyzed, and forthwith to return to the person from whom it was taken the remainder of each article seized as aforesaid. If any sample be found to be imitation butter, or substance designed to be used as a substitute for butter, it shall be retained by the State board of agriculture; but if any sample be found not to be imitation butter, or a substance designed to be used as a substitute for butter, it shall be returned forthwith to the person from whom it was taken.

No action for sale. SEC. 9. No action can be maintained on account of any sale or other contract made in violation of or with intent to violate this act, by or through any person who was knowingly a party to such wrongful sale or other contract.

Removing, etc., marks. SEC. 10. Whoever shall efface, erase, cancel, or remove any mark provided for by this act, with intent to mislead, deceive, or to violate any of the provisions of this act, shall be deemed guilty of a misdemeanor.

State board of agriculture to enforce. SEC. 11. The State board of agriculture shall be and is hereby charged with the enforcement of

Appropriation. this act. There is hereby appropriated to the State board of agriculture, out of any money not otherwise appropriated, the sum of five thousand dollars for the next biennial period, or so much thereof as may be necessary for the enforcement of this act: *Provided*, That all fines collected under the provisions of this act shall be covered into the State treasury. Actions under this act shall be brought in any court of competent jurisdiction.

Repealing clause. SEC. 12. All acts and parts of acts inconsistent with this act are hereby repealed.

MONTANA.

CODES AND STATUTES, Penal Code, 1905.

Substitutes for butter and cheese to be labeled. SECTION 684. Every person who manufactures for sale, or offers or exposes for sale, or has in his possession, with intent to sell, any article or substance in semblance of butter or cheese, not the legitimate product of the dairy, and not made exclusively of milk or cream, or in which the oil or fat of animals not produced from milk enters as a component part, or into which the oil or fat of animals not produced from milk has been introduced to take the place of cream, must distinctly stamp, brand, or mark in some conspicuous place upon every firkin, tub, or package of such article or substance in plain letters not less than one-quarter inch square each, the word "Oleomargarine," or the words "Imitation cheese," as the case may be; and in the retail sale of such article or substance, in parcels or otherwise, the seller must deliver to the purchaser therewith a printed label bearing the plainly printed word or words "Oleomargarine" or "Imitation cheese," plainly marked as aforesaid.

Signs to be displayed where imitations are sold or used.

SEC. 685. Every person dealing in the article or substance described in the next preceding section, and every hotel, restaurant, or boarding-house keeper using such article or substance in his business, must continuously and conspicuously keep posted up in not less than three exposed positions in and about his place of business a printed notice in the following words; "Oleomargarine" or "Imitation cheese" "sold (or used) here," which notice must be plainly printed with letters not less than two inches square each, and must upon furnishing the article or substance to his customers or guests, if inquiry is made, distinctly inform each of them that the article furnished is not butter or cheese, the general product of the dairy, but is oleomargarine or imitation cheese.

Penalty. SEC. 686. Every person and every officer or agent of any corporation who violates any of the provisions of the last two preceding sections is punishable by imprisonment in the county jail not exceeding one month or by fine not exceeding one hundred dollars.

Care and feed of cows. SEC. 1095. Every person who keeps a cow or any animal for the production of milk in a crowded or unhealthy place or in a diseased condition, or feeds such cow or animal upon any food that produces impure or unwholesome milk, is punishable by imprisonment in the county jail not exceeding three months or by fine not exceeding two hundred dollars, or both.

Political Code.

License for imitations. SEC. 4064.¹ * * * Every person, company, or corporation selling oleomargarine, butterine, or imitation cheese shall pay a license of ten cents per pound for all these articles sold.

* * * * *

NEBRASKA.²

COMPILED STATUTES, 1897, Part 3, Chapter 22.

Impure milk, its sale or delivery prohibited. 6898. SECTION 234. Whoever shall knowingly sell to any person or persons, or sell, deliver, or bring to be manufactured to any cheese or butter manufactory in this State, any milk diluted with water, or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as "skimmed milk," or shall keep back any part of milk known as "strippings," with intent to defraud, or shall knowingly sell milk the product of a diseased animal or animals, or shall knowingly use any poisonous or deleterious material in the manufacture of cheese
Penalty. or butter, shall be fined in any sum not less than twenty-five dollars nor more than one hundred dollars, and be liable in double the amount of damages to the person or persons upon whom such fraud shall be committed.

Chapter 23.

Imitations of butter or cheese to be marked. 6927. SEC. 245k. That any person, company, or corporation who shall manufacture for sale any article, or who may offer or expose for sale any article or substance in semblance of butter or cheese, not the legitimate product of the dairy and not made exclusively of milk or cream, or into which any vegetable oil or fat of animals not produced from milk enters as a component part, or into which melted butter or any oil thereof has been introduced to take the place of cream, shall distinctly and durably stamp, brand, or mark upon every tub, firkin, box, or package of such article or substance the word "Oleomargarine" or "Butterine," in plain Roman letters not less than half an inch square, placed horizontally in proper order, and in case of retail sales of such articles or substances in parcels, the seller shall in all cases deliver therewith to the purchaser a written or printed label bearing the plainly written or printed word "Oleomargarine" or "Butterine," in type or letters aforesaid, and every sale of such article or substance not so stamped, branded, marked, or labeled shall be void, and no action shall be maintained for the price thereof.

¹ Act approved March 16, 1885.

² 245k-245m = Laws 1883, chapter 53. 245m¹-245m¹¹ = Laws 1885, chapter 78, sections 1-10. 245n = Laws 1883, chapter 52.

Penalty. 6928. SEC. 245l. Any person, company, or corporation who shall sell or offer for sale, or have in his or her possession with intent to sell, contrary to the provisions of this act, any of the said articles not so stamped, marked, or labeled, or in case of retail sales, without delivery of the label required by section one of this act, shall for each such offense forfeit and pay a fine of one hundred dollars, to be recovered in any court in the State of competent jurisdiction.

Penalty. 6929. SEC. 245m. That any person, company, or corporation who shall sell, or offer, or expose for sale, or shall cause or procure to be sold, any article required by the first section of this act to be marked, branded, stamped, or labeled, not so marked, branded, stamped, or labeled, shall be guilty of a misdemeanor, and on trial for such misdemeanor, proof of the sale or offer, or exposure alleged, shall be presumptive of knowledge of the character of the article so sold or offered.

Imitation butter and cheese defined. 6930. SEC. 245m¹. That for the purposes of this act every article, substance, or compound other than produced from pure milk, or cream from the same, made in the semblance of butter and designed to be used as a substitute for butter made from pure milk, or cream from the same, is hereby declared to be imitation butter, and that for the purposes of this act, every article, substance, or compound, other than that produced from pure milk, or cream from the same, made in the semblance of cheese and designed to be used as a substitute for cheese made from pure milk, or cream from the same, is hereby declared to be imitation cheese: *Provided*, That the use of salt, rennet, and other harmless coloring matter for coloring the product of pure milk, or cream, shall not be construed to render such product an imitation.

Coloring prohibited. 6931. SEC. 245m². No person, firm, or corporation, by himself, or his agents, servants, or employees, shall coat, powder, or color with annatto, or any coloring matter whatever, any substance designed as a substitute for butter or cheese, whereby such substitute or product so colored or compounded shall be made to resemble butter or cheese, the product of the dairy. No person, firm, or corporation, by himself, his agents, or servants, or employees, shall combine any animal fat, or vegetable oil, or other substance with butter or cheese; or combine therewith, or with animal fat, or vegetable oil, or a combination of the two, or with either one, any other substance or substances whatever; or combine with annatto, or compound with the same, or any substance or substances containing annatto, or compound of the same, or any coloring matter whatever, with imitation butter, or imitation cheese, as defined in the first section of this act, for the purpose, or with the effect, of imparting thereto a yellow color, or any shade of yellow, so that such imitation butter, or imitation cheese, shall resemble yellow or any shade of genuine yellow butter or cheese. Nor introduce any such coloring matter, or substance, or substances, containing such coloring matter into any one of the articles of which the same is composed: *Providing*, Salt, rennet, etc., permitted. Nothing in this act shall be construed to prohibit the use of salt, rennet, and harmless coloring matter for coloring the products of pure milk, or cream from the same. No person, firm, or corporation, by himself, his agents, servants, or employees, shall produce or manufacture any substance in imitation or semblance of natural butter, or cheese, nor

Imitations regulated. sell, or have in his possession, nor keep for sale, nor offer for sale any imitation butter, or imitation cheese, made or manufactured, compounded, or produced in violation of this section, whether such imitation butter or imitation cheese shall be made or produced in this State or elsewhere. Every tub, firkin, or box containing imitation butter, or imitation cheese, so produced, manufactured, sold, had in possession, kept for sale, or offered for sale, shall constitute, and is hereby declared, a separate and distinct offense on the part of the person, firm, or corporation so producing, manufacturing, selling, having in possession, keeping for sale, or offering for sale, said tub, firkin, or box, and every person, firm, or corporation violating any one of the provisions of this section, shall, upon conviction, be fined in not less than ten dollars nor more than twenty dollars for each offense: *And further provided*, That this section shall not be construed to prohibit the manufacture and sale, under the regulations hereinafter provided, of substances designed to be used as a substitute for butter or cheese, and not manufactured or colored as herein prohibited.

Marks for imitation butter or cheese. 6932. SEC. 245m³. Every person, firm, or corporation who lawfully manufactures any substance designed to be used as a substitute for butter or cheese shall mark, by branding, stamping, or stenciling, upon the top and side of each tub, firkin, or box, or other package, in which such article is kept, and in which it shall be removed from the place where it is produced, in a clean, legible, and durable manner, in the English

language, the words "Imitation butter," or "Imitation cheese," as the case may be, in printed letters, in plain Roman type, each of which letters shall not be less than one inch in length by one inch in width.

Transporting unlabeled article. 6933. SEC. 245m⁴. No person, firm, or corporation, by himself, his agents, servants, or employees, shall ship, consign, or forward by any common carrier, whether public or private, any substance designed to be used as a substitute for butter or cheese, and no carrier shall knowingly receive the same for the purpose of forwarding or transporting, unless it be manufactured and marked as provided in the preceding sections of this act, and unless it be consigned by the carrier and receipted for by its true name: *Provided*, That this act shall not apply to any goods in transit between foreign States across the State of Nebraska.

Possession of unlabeled imitations. 6934. SEC. 245m⁵. No person, firm, or corporation, by himself, his agents, servants, or employees, shall have in his possession or under his control any substance designed to be used as a substitute for butter or cheese, unless the tub, firkin, box, or other package containing the same be clearly and durably marked, as provided by section three of this act: *Provided*, That this section shall not be so construed as to apply to persons who have the same in their possession for actual consumption by themselves or family. Every person, firm, or corporation, by himself, his agents, servants, or employees, having in his possession or control any substance designed to be used as a substitute for butter or cheese, which is not marked as required by the provisions of this act, shall be presumed to have known during the time of such possession or control the true character and name of such product, as fixed by this act.

Information to purchasers. 6935. SEC. 245m⁶. No person, firm, or corporation, by himself, his agents, or servants, or employees, shall sell, or offer for sale, any substance designed to be used for a substitute for butter or cheese; and no person, firm, or corporation, by himself, his agents, servants, or employees, shall sell any substance designed to be used as a substitute for butter or cheese, unless he shall inform the purchaser distinctly at the time of sale that the same is a substitute for butter or cheese, as the case may be, and shall deliver to the purchaser, at the time of sale, a statement clearly printed in the English language, which shall refer to the article sold, and which shall contain in permanent and plain Roman type a statement that the substance so sold is a substitute for butter or cheese, as the case may be, and such statement shall also give the name and place of business of the maker.

Display of signs. 6936. SEC. 245m⁷. No keeper or proprietor of any bakery, hotel, public institution, dining car, restaurant, saloon, lunch counter, or place of public entertainment, or person having charge thereof, or employed thereat, or any person, firm, or corporation, furnishing board for others than members of his own family, or for any employees where such board is furnished for a compensation, or as any part of the compensation of any such employee, shall keep, use, or serve therein, either as food for his guests, boarders, inmates, patrons, customers, or employees, or for cooking purposes, any imitation butter, or imitation cheese, as defined in section one of this act; and in using or serving any substance designed as a substitute for butter or cheese, as herein defined, he or they shall display and keep posted a card opposite each table in a conspicuous place where the same may be easily seen and read, in the dining room, eating room, lunch room, restaurant, hotel, public institution, dining car, boarding house, saloon, or place of public entertainment, and place where such substance designed as a substitute is sold, used, or disposed of, which card shall be of white, and in size not less than ten by fourteen inches; upon which shall be printed in plain, black Roman letters, not less in size than one inch in length and one-half inch in width, the words "Imitation butter used here," or "Imitation cheese used here," as the case may be, and said cards shall not contain any other words than the words above described. Any person, firm, or corporation violating the provisions of this section, shall, upon conviction thereof, be punished by a **Penalty.** fine of not less than twenty-five dollars, nor over fifty dollars, or by imprisonment in the county jail for not more than thirty days.

6937. SEC. 245m⁸ (amended 1895, chapter 79). Whoever shall violate any of the provisions of section three, four, five, six, and nine of this act shall, for the first offense, be punished by a fine of not less than twenty-five dollars nor more than fifty dollars, or by imprisonment not exceeding thirty days; and for each subsequent offense by a fine of not less than fifty dollars nor more than one hundred dollars, or by imprisonment in the county jail not less than thirty days nor more than six months, or by both such fine and imprisonment in

the discretion of the court: *Provided, however,* That no provision of or in this act shall be construed to prevent, or as a penalty against, the manufacture of imitation butter and imitation cheese within this State, under the restrictions and provisions of the United States law, for shipments to points outside of this State.

No action on account of sale. 6938. SEC. 245m⁹. No action can be maintained on account of any sale or other contract made in violation of, or with intent to violate, any of the provisions of this act by or through any person, firm, or corporation who was knowingly a party to such wrongful sale or other contract. **Effacing marks.** Whoever shall mutilate, obscure, conceal, efface, cancel, or remove any mark provided for by this section, or cause or permit the same to be done, with intent to mislead, deceive, or to violate any of the provisions of this act, shall be guilty of a misdemeanor.

Selling substitutes for genuine. 6939. SEC. 425m¹⁰. Whoever sells or offers for sale to any person who asks, sends, or inquires for butter, imitation butter, or imitation cheese, or any substance made in imitation of or semblance of pure butter, not made entirely from milk of cows, with or without coloring matter, shall be guilty of fraud, and punished by a fine of not less than twenty-five dollars nor more than fifty dollars for each offense.

Repealing clause. SEC. 245m¹¹. (Repealed all acts and parts of acts in conflict.)

Impure milk, sale or delivery prohibited. 6940. SEC. 245n. Whoever shall knowingly sell or supply or bring to be manufactured to any cheese manufactory, butter manufactory, or creamery in this State any milk diluted with water or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as "skimmed milk," or whoever shall keep any part of the milk known as "strippings," or whoever shall knowingly bring or supply milk to any cheese manufactory, butter manufactory, or creamery that is tainted or partly sour from want of proper care in keeping pails, strainers, or any vessel in which said milk is kept, clean and sweet, after being notified of such taint or carelessness, or any cheese manufacturer or butter manufacturer who shall knowingly use, or direct any of his employees to use, for his or their individual benefit, any cream of the milk brought to the cheese or butter manufacturer, without the consent of all the owners thereof, shall, for each and every offense, forfeit and pay a sum of not less than twenty-five dollars nor more than one hundred dollars, with the costs of suit to be sued for in any court of competent jurisdiction, for the benefit of the person or persons, firm, association, or corporation, or their assignees, upon whom such fraud be committed.

Use of cream in factories. **Penalty.** of not less than twenty-five dollars nor more than one hundred dollars, with the costs of suit to be sued for in any court of competent jurisdiction, for the benefit of the person or persons, firm, association, or corporation, or their assignees, upon whom such fraud be committed.

GENERAL LAWS of 1897, Chapter 90.

AN ACT to provide against the adulteration of food, prohibiting the sale, or offering for sale, of adulterated food and providing a penalty for the violation thereof. (Approved, April 12, 1897.)

Adulterated food prohibited. SECTION 1. That no person shall, within this State, manufacture for sale, offer for sale, or sell any article of food which is adulterated, within the meaning of this act.

Food defined. SEC. 2. The term "food," as used herein, shall include all articles used for food or drink by man, whether simple, mixed, or compound.

Adulteration defined. SEC. 3. An article of food shall be deemed to be adulterated within the meaning of this act in the following cases: First, if any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its quality, strength, or purity; second, if any inferior or cheaper substance or substances have been substituted wholly or in part for it; third, if any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; fourth, if it is an imitation of, or is sold under the name of another article; fifth, if it consists wholly, or in part, of a diseased, decomposed, putrid, infected, tainted, or rotten animal or vegetable substance or article, whether manufactured or not; or, in the case of milk, if it is the produce of a diseased animal or diluted with any inferior liquid or mixed with any inferior substance; sixth, if it is coated, polished, or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; seventh, if it contains any added substance or ingredient which is poisonous or injurious to health, or any deleterious substance not a necessary ingredient in its manufacture: *Provided,* That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles of food, if the same be distinctly labeled as mixtures or compounds and are not

injurious to health, and contain no ingredient not necessary to the preparation of the genuine article of such mixtures or compounds, and from which no necessary ingredient in its preparation is eliminated.

Samples to be furnished. SEC. 4. Every person manufacturing, offering or exposing for sale or delivering to a purchaser, any article of food included in the provisions of this act, shall furnish to any person interested, or demanding the same who shall apply to him for the purpose, and shall tender to him the value of the same, a sample sufficient for the analysis of any such article of food which is in his possession.

Penalty. SEC. 5. Whoever refuses to comply, upon demand, with the requirements of section four, and whoever violates any of the provisions of this act, shall be guilty of a misdemeanor, and upon conviction shall be fined in any sum not exceeding one hundred nor less than twenty-five dollars, or imprisoned in the county jail not exceeding three months. And any person found guilty of manufacturing, offering for sale, or selling an adulterated article of food under the provisions of this act shall be adjudged to pay, in addition to the penalties hereinbefore provided for, all necessary costs and expenses incurred in inspecting and analyzing such adulterated articles of which said person may have been found guilty of manufacturing, selling, or offering for sale, which shall be adjudged as a part of the penalty by the court in the same action wherein he is found guilty.

NEVADA.

GENERAL STATUTES, 1885. (Bally and Hammond).

AN ACT to prevent the adulteration of milk, and to prevent traffic in impure and unwholesome milk. (Approved February 17, 1879. 36.)

Sale of impure milk; penalty. 4801. SECTION 1. Any person or persons who shall knowingly sell or exchange, or expose for sale or exchange, any impure, adulterated, or unwholesome milk, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than one hundred dollars for each and every offense; and if the fine is not paid, then said person or persons so convicted shall be imprisoned in the county jail for not less than thirty days.

Care of cows. 4802. SEC. 2. Any person or persons who shall adulterate milk, with the view of offering the same for sale or exchange, or shall keep cows for the production of milk for market, or for sale or exchange, in a crowded or unhealthy condition, or feed the same on food that produces impure, diseased, or unwholesome milk, or who shall sell or exchange, or offer to sale or exchange, any milk as pure, from which the cream or any portion thereof has been taken, except as hereinafter provided, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine of not less than one hundred dollars for each and every offense; and if the fine is not paid, the person or persons so convicted shall be imprisoned in the county jail for not less than thirty days.

Adulteration defined. 4803. SEC. 3. The addition of water or any substance is hereby declared an adulteration; any milk that is obtained from animals that are fed on distillery, brewery, hotel, or restaurant waste, usually called "swill," or upon any substance in a state of putrefaction, or upon impure matter from stalls and stables, is hereby declared to be impure and unwholesome, and any person or persons offending, as aforesaid, shall be deemed guilty of a misdemeanor and, on conviction thereof, shall be punished by a fine of not less than one hundred dollars for each and every offense; and if the fine is not paid, the person or persons so convicted shall be imprisoned in the county jail for not less than thirty days.

Skimmed milk permitted. 4804. SEC. 4. Nothing in this act shall be construed to prevent the sale of skimmed milk, provided the person or persons selling the same shall first make known the fact that it is skimmed milk, and shall sell it as such; and any person or persons who shall violate the provisions of this section shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be subject to the penalties prescribed in section two of this act.

Recovery of penalties. 4805. SEC. 5. The penalties hereinbefore provided shall be recoverable before any court having jurisdiction of the same;

one-half of such fine shall be paid to the person or persons who shall make the complaint and prosecute the same, and the other half shall be paid into the school fund.

SUPPLEMENT. (Approved February 20, 1881. 59.)

Milk inspector. 4806. SECTION 1. There shall be appointed by the board of county commissioners of said county a milk inspector, whose duties shall be as provided in section two of this act.

Duty of inspector. 4807. SEC. 2. It shall be the duty of the said milk inspector to inspect milk offered for sale by vendors in his county, and if found adulterated, unwholesome, and impure, he shall cause the arrest of said vendor or vendors and prosecute them in any court of competent jurisdiction in this State.

Penalties. 4808. SEC. 3. If said vendor or vendors are found guilty of the violation of this act, and the act to which this is supplemental, they shall be fined in any sum not less than twenty-five dollars nor more than two hundred dollars, or be imprisoned in the county jail for not less than fifty nor more than one hundred days. All fines under the provisions of this act to be paid

Disposition of fines. into the school fund.

Compensation of inspector. 4809. SEC. 4. The compensation for said milk inspector's services shall be regulated and ordered paid by the board of county commissioners of his county.

AN ACT to punish and prevent deception in the manufacture and sale of butter. (Approved February 4, 1881. 24.)

Imitations of butter to be labeled. 4810. SECTION 1. Every person who shall manufacture for sale any article or substance in semblance of butter that is not the legitimate product of the dairy, and not made exclusively of milk or cream, but into which the oil or fat of animals, not produced from milk, enters as a component part, or into which melted butter or any oil thereof has been introduced to take the place of cream, unless the package containing such article or substance shall be labeled or branded with the word "Oleomargarine," as provided in section two of this act, shall be deemed guilty of a misdemeanor, and upon conviction therefor shall be fined in any sum not exceeding five hundred dollars, and shall be confined in the county jail not less than thirty days nor more than six months.

All packages to be labeled. 4811. SEC. 2. Every person who shall sell or offer or expose for sale, or have in his or her possession with intent to sell, any of the said article or substance mentioned in section one of this act, shall distinctly mark, brand, or label every package containing such substance, whether at wholesale or retail, with the word "Oleomargarine;" and every person who shall sell, or offer for sale, such substance not so branded, marked, or labeled shall be guilty of a misdemeanor, and, upon conviction therefor, in any court of this State having cognizance thereof, shall pay a fine of not less than twenty-five dollars nor more than one hundred dollars for each and every offense.

Size of letters. 4812. SEC. 3. The branding or marking spoken of in this act, if on rolls or prints, shall be in letters not less than one-fourth of an inch square, and if on tubs or other packages, the letters shall not be less than one-half inch square.

NEW HAMPSHIRE.

PUBLIC STATUTES, 1891, Chapter 127.¹

Milk inspectors, how appointed. SECTION 1. The mayor and aldermen of cities and the selectmen of towns may annually appoint one or more persons to be inspectors of milk for their respective places and fix the compensation to be paid to them. Each inspector shall be sworn before entering upon the

¹ Sections 1-11—Laws 1883, chapter 42, sections 1-4, 7, 8, 11, 12. Sections 12, 13—General Statutes, chapter 111, sections 3, 4; Laws 1890, chapter 33, sections 1, 2 (General Laws, chapter 122, sections 3, 4). Sections 14-16—Laws 1873, chapter 11, sections 1-3 (General Laws, chapter 122, sections 5-7). Section 17—Laws 1860, chapter 2330, section 8; 1886, chapter 4265, section 1 (General Statutes, chapter 253, section 4; General Laws, chapter 271, section 4); Laws 1883, chapter 42, sections 5, 6. Section 18—Laws 1883, chapter 42, section 9. Sections 20-22—Laws 1881, chapter 57, sections 3-5; 1885, chapter 63, sections 1-3. Section 23—Laws 1883, chapter 42, section 10; 1885, chapter 52, section 1. Section 24—Laws 1885, chapter 52, section 1.

duties of the office, and shall publish a notice of his appointment for two weeks in a newspaper published in his city or town, or, if no newspaper is published therein, he shall post the notice in two or more public places in such city or town.

Licenses required. SEC. 2. It shall be unlawful for any person to go about in carriages or otherwise selling milk, or offering it for sale, in any city or town having inspectors of milk, unless a license therefor has been procured for such inspectors as provided in the next section.

Contents of license. SEC. 3. The inspectors shall grant to any party who applies therefor and pays fifty cents a license to carry on said business within their town until the first day of June next following, and shall renew such license annually in the month of May, upon application and the payment of a like fee. The license and its renewals shall state the name of the party to whom granted, his residence, place of business, the names of all persons employed by him in doing the business, the number of carriages or other vehicles used, the name of the town for which it is granted, and the number of the license; and it shall not be transferable. The person to whom any license is granted shall

Sign on wagon. cause his name, place of business, and the number of his license to be legibly placed on the outer sides of all carriages and vehicles used in the business, and shall report to the inspectors the names of all his new employees in the business immediately after they are employed; and the inspectors shall thereupon enter the same upon his license, and also note thereon the names of any who have left his employ.

Penalty. SEC. 4. Whoever goes about in carriages or otherwise in any such city or town selling milk, or offering it for sale, or having it in possession with intent to sell, unless a license has first been obtained as provided in the preceding sections, shall be fined not more than fifty dollars for the first offense, and for any subsequent offense he shall be fined fifty dollars or be imprisoned not more than sixty days, or both.

Milk sellers to register. SEC. 5. Every person, before selling milk or offering it for sale in a store, booth, or market place in a city or town in which inspectors of milk have been appointed, shall register with such inspectors and pay to them fifty cents for the use of the city or town. Any person who neglects to so register shall be fined not more than twenty dollars for each offense.

Powers of inspectors. SEC. 6. The inspectors may enter places where milk is stored, or kept for sale and carriages used for the conveyance thereof, and may examine the milk there found; and when they have reason to believe that any such milk is adulterated they shall cause specimens thereof to be analyzed or otherwise satisfactorily tested, and shall make a record of the result of the analysis or test.

Record of licenses. SEC. 7. They shall make a record of all licenses granted and renewed by them, which, together with all registries made with them, shall be open to public inspection, and shall pay to the treasurer of their city or town all fees received within thirty days after receipt.

Sale of skimmed milk. SEC. 8. No dealer in milk, and no servant or agent of a dealer, shall sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, milk from which the cream, or any part thereof, has been removed, unless in a vessel, can, or package from or in which such milk is sold the words "Skimmed milk" are distinctly marked in letters not less than one inch in length. Whoever violates the provisions of this section shall be punished by the penalties provided in section seventeen of this chapter.

Publication of names of offenders. SEC. 9. Each inspector shall cause the name and place of business of every person convicted of selling adulterated milk, or of having the same in his possession with intent to sell, to be published in two newspapers in the county in which the offense was committed.

Neglect of duty. SEC. 10. Any inspector of milk, and any servant or agent of an inspector, who willfully connives at or assists in a violation of the provisions of this chapter shall be fined not more than three hundred dollars or be imprisoned not more than sixty days, or both.

In force where. SEC. 11. The preceding sections shall be in force in those towns and cities only which shall adopt the same.

Wine measure in selling milk. SEC. 12. Milk shall be bought and sold by wine measure, the standard for which shall be two hundred and thirty-one cubic inches to the gallon, and for subdivisions of the gallon in the same proportion.

Measures to be proved and marked. SEC. 13. All measures or vessels used in the sale of milk shall be tried and proved by the standard of wine measure, and the quantity they hold agreeably to such standard shall be marked thereon. Any person selling any milk by any other than measures so tried, sealed, and marked shall forfeit for each offense ten dollars.

Milk cans sealed annually. SEC. 14. All milk cans used by the persons engaged in the business of purchasing milk at wholesale shall be sealed annually by the sealer of weights and measures in the city or town where the purchaser resides; and no milk can shall be sealed which does not contain one or more quarts, and the capacity of the can shall be legibly marked upon it by the sealer.

Capacity of cans. SEC. 15. When milk is purchased by the can, such can shall hold eight quarts of milk and no more.

Penalty. SEC. 16. Any person violating the provisions of the two preceding sections shall be fined not more than fifty dollars.

Sale of impure milk. SEC. 17. If any person shall adulterate milk with water or otherwise, to be sold, or shall sell, or offer for sale, or have in possession with intent to sell, any adulterated or unwholesome milk, or any milk produced from sick or diseased cows or cows fed upon the refuse of breweries or distilleries, or any other substance which may be deleterious to the quality of the milk, or shall sell, or offer for sale, or have in possession with intent to sell as pure milk, any milk from which the cream or a part thereof has been removed, he shall be fined not more than three hundred dollars or be imprisoned not more than sixty days, or both.

Milk standard. SEC. 18. In all proceedings under this chapter, if the milk is shown upon analysis to contain more than eighty-seven per cent of watery fluid or to contain less than thirteen per cent of milk solids, it shall be *prima facie* evidence that the milk is adulterated.

SEC. 19. (Amended by section 1, chapter 115, Laws 1895, below.)

Penalty. SEC. 20. If any person shall sell, or offer for sale, or keep in possession with intent to sell, in this State, any substance or compound of the kinds described in the preceding section in a manner that is made unlawful by said section, or shall sell, offer for sale, or keep in possession with intent to sell, any such substance or compound without disclosing its true character, he shall be fined not more than one hundred dollars or be imprisoned not more than sixty days, or both. (Amendment. See Laws 1893, chapter 37, below.)

Analysis of samples. SEC. 21. The complainant in any such action may cause specimens of butter or cheese suspected of being imitations to be analyzed or tested. The expense of such analysis or test, not exceeding twenty dollars in any one case, may be taxed as costs.

Butter and cheese defined. SEC. 22. The terms "butter" and "cheese" shall be understood to mean the products usually known by those names, and which are manufactured exclusively from milk or cream, or both, with salt and with or without coloring matter, and if cheese, with rennet.

Complaints to be made by inspectors, etc. SEC. 23. It shall be the duty of inspectors of milk, if any in the town, and if not, of the health officers, to make complaints for violations of this chapter whenever anyone furnishes to them satisfactory evidence thereof, and to prosecute the same, but any other person may do so.

Disposition of fines. SEC. 24. Any person who begins and prosecutes any action under this chapter at his own expense, and any town whose officers begin and prosecute any such action at its expense, shall be entitled to one-half of every fine imposed therein, and the county to the other half.

LAWS OF 1893, Chapter 37.

AN ACT in amendment of chapter 127 of the Public Statutes relating to the sale of adulterated butter, oleomargarine, and imitation cheese. (Approved March 23, 1893.)

Voiding the law. SECTION 1. If any person shall, within this State, solicit or take any order for any substance or compound, the sale, offer to sell, or keeping in possession of which with intent to sell is prohibited by the provisions of sections 19 and 20 of chapter 127 of the Public Statutes, to be delivered at any place without this State, knowing or having reasonable cause to believe that if so

delivered the same will be transported to this State and be sold in violation of the laws thereof, he shall be fined fifty dollars for the first offense and for Penalty. any subsequent offense he shall be fined one hundred dollars, or be imprisoned not more than ninety days.

In effect. SEC. 2. This act shall take effect upon its passage.

LAWS OF 1865, Chapter 115.

AN ACT in amendment of chapter 127 of the Public Statutes relating to the sale of adulterated butter, oleomargarine, and imitation cheese. (Approved March 29, 1865.)

Imitations of butter and cheese regulated. SECTION 1. Section 19 of chapter 127 of the Public Statutes is hereby amended so as to read as follows: No person, by himself or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product, or compound made wholly or partly out of any fat, oil, or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be produced from unadulterated milk or cream of the same, which shall be imitation of yellow butter produced from pure unadulterated milk or cream of the same, unless the same is contained in tubs, firkins, boxes, or other packages, each of which has upon it to indicate the character of its contents the words "Adulterated butter," "Oleomargarine," or "Imitation cheese," as the case may be, in plain Roman letters not less than one-half inch in length, and so made, placed, or attached that they can readily be seen and read and can not be easily defaced, and if the substance or compound is a substitute for cheese, unless the cloth surrounding it has a like inscription, and if it is a substitute for butter, unless it shall be of some other color than that of yellow butter. When any such substance or compound is sold in less quantities than the original packages contain, the seller shall deliver to the purchaser with it a label bearing the words indicating its character as above, in like letters: *Provided*, Oleomargarine permitted. That nothing in this act shall be construed to prohibit the manufacture and sale of oleomargarine in separate and distinct form, and in such manner as will advise the consumer of its real character, free from any coloration or ingredient that causes it to look like butter.

Shall be marked when delivered. SEC. 2. It shall be unlawful for any person to peddle, sell, or deliver from any cart, wagon, or other vehicle upon the public streets or ways, oleomargarine, butterine, or any similar substance unless so branded and marked as required in section 1 of this act.

Patrons of eating places to be informed. SEC. 3. It shall be unlawful for any person to furnish or cause to be furnished, in any hotel, boarding house, restaurant, or at any lunch counter, oleomargarine, butterine, or any similar substance, to any guest or patron of said hotel, boarding house, restaurant, or lunch counter without first notifying such guest or patron that the substance so furnished is not butter.

Penalty. SEC. 4. Any person or persons violating any of the provisions of the foregoing sections shall, upon conviction thereof, be fined not less than twenty-five nor more than fifty dollars for the first offense, and for each subsequent offense not less than fifty nor more than one hundred dollars, or imprisonment not less than ten nor more than ninety days, or both.

NEW JERSEY.

PUBLIC LAWS OF 1865, Chapter 275. (General Statutes, 1865, Dairy, section 3.)

AN ACT to protect butter and cheese manufacturers. (Approved March 23, 1865.)

Sale of diluted or adulterated milk, etc.; penalty. SECTION 1. That whoever shall knowingly sell, supply, or bring to be manufactured, to any cheese or butter manufactory in this State, any milk diluted with water or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as "skimmed milk," or whoever shall keep back any part of the milk known as "strippings," shall for each and every offense forfeit and pay a sum of fifteen dollars, with costs of suit, to be sued for in an action of debt, in any court of competent jurisdiction, for the benefit of the person or persons, firm, association, or corporation upon whom such fraud shall be committed.

PUBLIC LAWS OF 1882, Chapter 82. (General Statutes, 1885, Dairy, sections 33-43.)

AN ACT to prevent the adulteration and to regulate the sale of milk. (Approved March 14, 1882.)

Skim milk regulations. SECTION 1. That every person who shall sell, or who shall offer or expose for sale, or who shall transport or carry, or who shall have in possession with intent to sell or offer for sale, any milk from which the cream or any part thereof has been removed, shall distinctly, durably, and permanently solder a label or tag of metal in a conspicuous place upon the outside and not more than six inches from the top of every can, vessel, or package containing such milk, and such metal label or tag shall have the words "Skimmed milk" stamped, indented, or engraved thereon in letters not less than two inches in height, and such milk shall only be sold or shipped in or retailed out of a can, vessel, or package so marked.

Care and feed of cows. SEC. 2. That every person who shall sell, or who shall offer for sale, or who shall transport or carry for the purpose of sale, or who shall have in possession with intent to sell or offer for sale, any impure, adulterated, or unwholesome milk, and every person who shall adulterate milk, or who shall keep cows for the production of milk in a crowded or unhealthy condition, or feed the same on food that produces impure, diseased, or unwholesome milk, or shall feed cows on distillery waste, usually called "swill," or upon any substance in a state of putrefaction or rottenness, or upon any substance of an unwholesome nature, shall be liable to the penalties hereinafter provided for in this act.

Adulterated and unwholesome milk. SEC. 3. That the addition of water or any other substance or thing is hereby declared an adulteration, and milk that is obtained from animals that are fed on distillery waste, usually called "swill," or upon any substance in a state of putrefaction or rottenness, or upon any substance of an unhealthy nature, or milk that has been exposed to or contaminated by the emanations, discharges, or exhalations from persons sick with any contagious disease, by which the health or life of any person may be endangered or compromised, is hereby declared to be impure and unwholesome.

Milk standard. SEC. 4. That in all prosecutions under this act, if the milk shall be shown, upon analysis by a member of the council of public analysts of this State or the chemist of the State Experiment Station, to contain more than eighty-eight per centum of watery fluids, or to contain less than twelve per centum of milk solids, such milk shall be deemed for the purpose of this act to be adulterated.

Penalty. SEC. 5. That every person who shall violate any of the provisions of this act shall be liable to a penalty of fifty dollars for the first offense and one hundred dollars for a second or subsequent offense.

Jurisdiction to try and punish. SEC. 6. That justices of the peace and recorders shall have jurisdiction to try and punish all persons for violating the provisions of this act, and the penalties prescribed in section five of this act, for the violation of any of the provisions of this act, may be enforced before any justice of the peace or recorder in any county where the offense is committed or where the offender is first apprehended.

SEC. 7. That said justice of the peace or recorder, upon receiving due proof, made before him by an affidavit of one or more persons, of the violation of any of the provisions of said act by any person or persons, is hereby authorized and required by his warrant, under his hand and seal, directed to any constable or police officer of his county, to cause such person or persons to be arrested and brought before said justice or recorder, who shall hear and determine the guilt or innocence of the person or persons so charged, and upon conviction of said person or persons, the said justice or recorder is hereby authorized and required to impose upon the offender so convicted before him the penalties prescribed for such offenses; and if any person so convicted shall fail to pay the penalty so imposed, together with the costs of the prosecution, the said justice or recorder is hereby authorized and required to commit such offender to the common jail of said county for a period of not less than ten days or more than sixty days: *Provided, however,* That an analysis of condemned milk shall be made by a member of the council of public analysts of this State, or the chemist of the State Experiment Station.

Evidence. SEC. 8. That the certificate of any member of the council of public analysts, or chemist of the State Experiment Station, given under his hand and seal, and sworn to and subscribed before any justice of the peace or notary public in this State, shall be taken and accepted as *prima facie* evidence.¹

Milk inspector. SEC. 9. That the State board of health is hereby empowered and directed to appoint each year a competent person who shall act as a State inspector of milk, at a salary of eight hundred dollars per annum, payable by the treasurer of this State, by warrant of the comptroller, in quarterly payments, for the purposes of this act, and in addition thereto said inspector shall be paid his actual traveling expenses while in the performance of his duties, and actual expenses of suits and costs of analysis brought by him under this act, payable by the treasurer of this State by warrant of the comptroller; said inspector shall act until removed by said board, or until his successor is appointed, and shall make such reports to said board at such time as it may direct; said inspector, having reason to believe the provisions of this act are being violated, shall have power to open any can, vessel, or package containing milk, whether sealed, locked, or otherwise or whether in transit or otherwise; and if upon inspection he shall find such can, vessel, or package to contain any milk which has been adulterated, or from which the cream, or any part thereof, has been removed, or which is sold, offered, or exposed for sale, or held in possession with intent to sell or offer for sale, in violation of any section of this act, said inspector is empowered and directed to take a sample of same for analysis and put into a can, vessel, or package.

Taking samples. to be sealed in the presence of one or more witnesses, and sent to any member of the council of public analysts or the chemist of the State Experimental Station, and also to condemn the same and pour the contents of such can, vessel, or package upon the ground or return the same to the consignor, and if upon analysis such milk shall prove to be adulterated, shall bring suit against the person or party so violating the law: *Provided, however,* That if upon analysis it is proved that the condemned milk is unadulterated, the State shall be liable for the value of the article destroyed, which shall be paid by the treasurer of this State by warrant of the comptroller. And said inspector is empowered to employ one or more assistants, who shall have power to inspect milk as provided by this act, said assistants to be paid not more than five dollars per day for each and every day of actual service in performance of their duties, as provided by this act, payable by the treasurer of this State, by warrant of the comptroller.

Disposition of penalties. SEC. 10. That all penalties imposed shall be paid into the treasury of this State, except in case the local board of health of any city, borough, town, or township shall prosecute the offender, in which case the penalties shall be paid into the treasury of the city, borough, town, or township so prosecuting: *Provided,* That in prosecutions by the executive officer of any local board of health, no expense shall be incurred to the State.

Act repealed. SEC. 11. That an act entitled "An act to prevent the adulteration of milk and to regulate the sale of milk," approved March twenty-second, one thousand eight hundred and eighty-one (P. L., 1881, p. 170), and all other acts or parts of acts inconsistent with this act be, and the same are hereby, repealed.

PUBLIC LAWS OF 1884, Chapter 90 (General Statutes, 1885, Dairy, sections 44-48).

SUPPLEMENT (Approved April 2, 1884).

Trial by jury. SECTION 1. That at any time previous to the hearing of a complaint against any person under the provisions of the aforesaid act, either party may appear before the justice or recorder and demand a trial by jury; whereupon the said justice or recorder shall issue a *venire facias* to summon a jury of twelve men, qualified by law to act as jurors, to try said complaint.

Judgment. SEC. 2. That in case the said jury find such person or persons guilty, then the said justice or recorder shall proceed as though he had determined such complaint without a jury; and in case such jury shall find such person or persons not guilty, the said justice or recorder shall enter judgment in his, her, or their favor accordingly, with costs.

Appeal. SEC. 3. That either party, upon paying all costs incurred and by filing with said justice or recorder within ten days after trial before him, a written notice of his or her intentions to appeal from the decision of said justice or recorder or jury, may appeal to the next court of general quarter sessions of the peace of the county in which said complaint was made and determined.

¹ Dairy commissioner states this is not legal and no such course should be taken.

Trial by jury. SEC. 4. That either party on appeal may demand a trial by jury, and said court of general quarter sessions shall proceed and try the same and make such adjudications as are herein provided in case of such trial before said justice or recorder.

Repealer. SEC. 5. That all acts and parts of acts inconsistent with the provisions of this act shall be and the same are hereby repealed.

PUBLIC LAWS OF 1886, Chapter 186. (General Statutes, 1895, Dairy, section 49.)

SUPPLEMENT. (Approved April 20, 1896.)

State dairy commissioner to assume duties, etc., of inspector. SECTION 1. That the appointment of a State inspector of milk, provided for in section nine of the act to which this is a supplement, be and the same is hereby discontinued, and that the State dairy commissioner shall be and is hereby empowered and directed to assume all the duties, privileges, and powers conferred on said State inspector of milk in section nine of the act to which this is a supplement: *Provided*, That said dairy commissioner shall not receive the salary, or any portion thereof, heretofore provided for said State inspector of milk.

PUBLIC LAWS OF 1887, Chapter 2 (General Statutes 1895, Dairy, section 50).

SUPPLEMENT. (Approved February 24, 1887.)

Milk may be analyzed by any chemist or chemists appointed by State board of health. SECTION 1. That the analysis of milk required by the provisions of sections four, seven, eight, and nine of the act to which this is a supplement may be made by any chemist or chemists appointed or designated by the State board of health, the provisions of said act to the contrary notwithstanding.

PUBLIC LAWS OF 1888, p. 461 (General Statutes 1895, Agriculture, section 81).

AN ACT to provide for the construction of a State laboratory for the State Agricultural Experiment Station. (Approved April 23, 1888.)

* * * * *

Chemists of experiment stations to analyze samples. SEC. 2. That the chemist or chemists of the State Agricultural Experiment Station shall analyze all samples of milk, butter, or other farm products, or the imitations thereof, that may be sent to said station by the State dairy commissioner and his assistants and agents, and shall report to the said commissioner the results of such analyses, and the costs thereof shall be paid out of the appropriation made to said station.

Costs, how paid.

PUBLIC LAWS OF 1891, Chapter 210 (General Statutes, 1895, Dairy, sections 51-54).

SUPPLEMENT. (Approved April 14, 1891.)

Scaled samples. SECTION 1. That when any inspector or his deputy, acting under the act to which this is a supplement, shall take any sample of milk for analysis, he shall divide said sample into two parts, shall duly seal each part in a suitable can, vessel, or package; shall tender and, if accepted, deliver, at the time of such taking, one part to the vender of said milk, or to the person having the custody of the same, with a statement in writing of the cause of the sample having been taken.

Defendant may produce evidence. SEC. 2. That in all prosecutions under the act to which this is a supplement the defendant may at the trial produce competent evidence to show the percentage of milk solids contained in the sample delivered to him, or to his agent or servant, as provided in section one thereof.

SEC. 3. That in all prosecutions under the act to which this is a supplement, where the violation charged is the addition of water or any other substance or thing, the defendant may at the trial produce competent evidence to show that the same has not been altered or adulterated.

Repealer. SEC. 4. That all acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

PUBLIC LAWS OF 1883, Chapter 185 (General Statutes, 1895, Dairy, sections 65, 66).

AN ACT to prohibit the sale of adulterated and skimmed milk in cities of this State. (Approved March 23, 1883.)

Adulterated or skimmed milk shall not be sold in cities of first class. SECTION 1. That no milk which has been watered, adulterated, or changed in any respect by the addition of water, or other substance, or by removal of cream, or any part thereof, shall be kept or offered for sale in any city of the first class in this State.

Penalty. SEC. 2. That any person who shall violate any of the provisions of this act shall be liable to a penalty of fifty dollars for the first offense and one hundred dollars for a second or subsequent offense, and that such penalties shall be recovered upon like evidence, by like procedure, and in the same method now provided for the collection of fines and penalties, under the act entitled "An act to prevent the adulteration and to regulate the sale of milk." approved March fourteenth, eighteen hundred and eighty-two.

PUBLIC LAWS OF 1883, Chapter 68 (General Statutes, 1895, Dairy, sections 55-64.)

AN ACT for the protection of producers and shippers of milk. (Approved March 8, 1883.)

Not lawful to use, sell, etc., any milk can without consent of owner. SECTION 1. That it shall be unlawful for any person, without the permission of the owner thereof, to use, sell, dispose of, buy, or traffic in, any milk can or cans marked or stamped with the name or initials of any shipper of milk residing within this State, or to willfully mar or erase said name or initials of any such shipper of milk so marked or stamped upon said can or cans.

Penalty for so using, selling, etc. SEC. 2. That any person who shall so use, sell, dispose of, buy, or traffic in, any such can or cans, or who shall so willfully mar or erase the said name or initials thereon, shall be liable to a penalty not less than fifty nor more than one hundred dollars, to be recovered by proceedings as hereinafter provided and set forth, together with all costs of such proceedings, which said penalty shall be for the use of the poor of the city, town, or township wherein such offense shall be committed.

Owner may make complaint against persons using cans. SEC. 3. That if any such owner, or his or her agent, has reason to believe and does believe that any of his or her can or cans so marked or stamped, has or have been unlawfully used as aforesaid by any person, or that any person has any of his or her said can or cans secreted in or upon his premises, or in any other place or places, any such owner, or his or her agent, may go before any justice of the peace of the county, or any police justice or recorder of any city wherein such offense may be or have been committed, and make complaint thereof under oath.

Magistrate to cause the arrest of person complained of. SEC. 4. That it shall be the duty of any justice of the peace, or any other magistrate as aforesaid, before whom any such complaint shall be made as aforesaid, thereupon to issue a process in the nature of a search warrant, directed to any constable or police officer of said city, town, or township, which shall recite said complaint as aforesaid, and shall command such constable or officers to immediately search the premises, place, or places mentioned in said complaint; and if, upon such search, any such can or cans as mentioned in said complaint be found to bring the same, together with the body of the person in whose possession they may be found, before such justice.

Proceedings before justice. SEC. 5. That when any such person as aforesaid shall be brought before any justice of the peace or such other magistrate upon a process issued as aforesaid, such person shall enter into a recognizance with good security, to be approved by said justice, in the penalty of one hundred dollars, to appear at such time as the said justice shall appoint for a hearing under said complaint, which hearing shall not be less than five nor more than ten days from the day of said arrest, and may be adjourned by said justice from time to time, on good and sufficient cause being shown therefor, and in default of such recognizance such person shall be committed by said justice to the county jail to abide a hearing, upon which hearing the said justice shall proceed to hear and determine as to the truth of said complaint, and the ownership of said can or cans that may be brought before him; and if said justice shall determine such person to be guilty of the offense as charged in said complaint, he shall thereupon render judgment against such person for an

Penalty. amount of not less than fifty dollars nor more than one hundred dollars, and all costs of such proceedings, and in default of payment thereof issue execution therefor against the goods and chattels and the body of such person, and shall immediately deliver such can or cans into the possession of such owner to whom the same shall appear to belong.

When person is not found, magistrate to determine possession of cans. SEC. 6. That if, upon the issue of any such process as aforesaid, the said constable or other officer shall be unable to find the person therein named, but shall find any can or cans as therein set forth, he shall bring such can or cans before such justice, who shall thereupon proceed to determine the right of such complainant thereto; and if upon the hearing had thereon he shall be satisfied that such can or cans rightfully belong to such complainant, he shall forthwith deliver the same into his or her possession, or the possession of his or her agent.

May demand a jury trial. SEC. 7. That any time previous to the hearing of said complaint as aforesaid, either party may demand a trial by jury, whereupon said justice shall issue a venire facias to summon a jury of twelve men, competent as jurymen, to try said complaint, and to decide whether the person complained of be guilty or not guilty, which said jury shall also determine the rightful ownership of every such can or cans, if any there be; and in case the said jury decide such person guilty, then said justice shall proceed as though he had so determined, no jury having been demanded.

May appeal to court of quarter sessions. SEC. 8. That either party, upon paying all costs incurred and by filing with said justice, within ten days after trial before him, a written notice of his or her intention to appeal from the decision of said justice or jury, may appeal to the next court of general quarter sessions of the peace of said county, and may there demand a trial by jury, which court shall proceed to try the same and make such adjudication and delivery thereon as is herein provided in case of such trial before said justice.

Proceedings, how conducted. SEC. 9. That except as herein provided, all proceedings had under the provisions of this act shall, as nearly as may be, be regulated by the provisions of and conducted in the manner prescribed in and by an act entitled "An act constituting courts for the trial of small causes," and the several supplements thereto.

Repealer. SEC. 10. That all acts and parts of acts inconsistent with the provisions of this act are hereby repealed, and that this act shall take effect immediately.

PUBLIC LAWS OF 1891, Chapter 257 (General Statutes, 1896, Dairy, section, 67-73).

AN ACT in relation to milk cans. (Approved April 16, 1891.)

Illegal to use, etc., milk cans belonging to dealers, when. SECTION 1. That it is hereby declared to be unlawful for any person or persons, without the consent of the owner or owners, or shipper or shippers, or his, her, or their agent, to use or sell, dispose of, buy, or traffic in any milk or cream can or cans belonging to any dealer or dealers, shipper or shippers of milk or cream, residing in the State of New Jersey or elsewhere, who may ship milk or cream to any city, town, or place within this State, having the name or initials of the owner or owners of such dealer or dealers, or shipper or shippers stamped, marked, or fastened on such can or cans, or to willfully mar, erase, or change by re-marking or otherwise said name or initials of any such owner or owners, or dealer or dealers, or shipper or shippers, so stamped, marked, or fastened upon said can or cans.

Evidence of unlawful use or traffic. SEC. 2. That the fact of any person or persons, without the consent of the owner, dealer, or dealers, or shipper or shippers thereof, or his, her, or their agent, either using, selling, disposing of, buying, trafficking in, or having in his, her, or their possession, or under his, her, or their control, any such milk or cream can or cans, shall be presumptive evidence of the unlawful use, purchase of, or traffic in such can or cans.

Cans used in violation of this act may be emptied. SEC. 3. That such can or cans, full or partly full of milk or cream used in violation of this act, may be emptied into the street or elsewhere of their contents by their owner or owners, dealer or dealers, shipper or shippers, or his, her, or their agent, and taken possession of by any of said several parties who shall not

Provide. be liable for damages therefor: *Provided*, That any of said several parties entitled to the possession of such can or cans shall first give notice to the party or parties having the possession of such can or cans to empty the same.

Penalty. SEC. 4. That any person or persons who shall, in violation of this act, either use, sell, dispose of, buy, traffic in, or or have in his, her, or their possession, any such can or cans, or who shall willfully mar, erase, or change by re-marking or otherwise, the said name or initials of any such owner or owners, dealer or dealers, shipper or shippers, so stamped, marked, or fastened upon said can or cans as in this act provided, shall be liable to a penalty of fifty dollars for any such can either so used, sold, disposed of, bought, trafficked in, or found in his, her, or their possession: such penalties may be recovered by action in the supreme court of this State, with costs and disbursements, and the place of trial of such actions may be in the county in which the owner or owners, dealer or dealers, shipper or shippers of any such cans may reside at the commencement of such action.

Agents may sue in their own names. SEC. 5. That the agent of such owner or owners, dealer or dealers, or shipper or shippers, shall have full power and authority to sue in his name and take any proceedings authorized by this act without joining the real party or parties in interest that he represents, and may join in persons as shall jointly or severally have violated any of the provisions of this act, notwithstanding that the cause of action is separate and distinct as to each and every one of such plaintiffs and defendants, and may recover against any one or more of such person or persons.

Owners to make complaints. SEC. 6. That if any such owner or owners, dealer or dealers, shipper or shippers, his, her, or their agent has reason to believe and does believe that any of such can or cans so stamped or marked has or have been unlawfully used as aforesaid, by any person or persons, or that any person or persons has any of such can or cans secreted in or upon his, her, or their premises, or any other place or places, any such owner or owners, dealer or dealers, shipper or shippers, or his, her, or their agent may go before any justice of the peace or magistrate having civil jurisdiction in the city, town, or place, or any part thereof, wherein such offenses may be or have been committed and make complaint thereof under oath, which complaint may be wholly upon information and belief, whereupon said justice of the peace or magistrate before whom such complaint shall have been made shall issue a process in the nature of **Justice to issue process.** a search warrant, directed to any constable, marshal, or other executive officer of any city, town, or place which shall recite the complaint or the substance thereof, and shall command the said constable, marshal, or other executive officer to immediately search the premises, place, or places mentioned in said complaint, be found,¹ to bring the same, together with the body of the person or persons in whose possession they may be found, before such justice of the peace or magistrate, and such proceedings shall be had as are now had in cases wherein search warrants are issued.

Repealer. SEC. 7. That all acts and parts of acts inconsistent herewith be, and the same are hereby, repealed, and that this act shall take effect immediately.

PUBLIC LAWS OF 1864, Chapter 370 (General Statutes 1865, Dairy, sections 1, 2).

AN ACT to regulate the tare of butter and cheese firkins, tubs, and vessels. (Approved April 7, 1864.)

Name of manufacturer and weight of vessel to be branded. SECTION 1. That every cooper or manufacturer of firkins, tubs, or other vessels for the package of butter or cheese, shall brand in legible letters and characters upon every such firkin, tub, or vessel by him manufactured his name, together with the actual and true weight of such firkin, tub, or vessel, and if any cooper or manufacturer shall dispose of any such firkin, tub, or vessel without such brand, or shall falsely brand the same, he shall forfeit and pay to such person as shall prosecute for the same the sum of twenty-five dollars, to be recovered by action of debt in any court of competent jurisdiction.

Penalty for neglect or defacing brand. SEC. 2. That it shall not be lawful for any person to sell and dispose of any butter or cheese packed or placed in any firkin, tub, or vessel manufactured or made for such purpose in this State, unless such firkin, tub, or vessel shall be branded in the manner provided in the first section of this act, and if any person shall disregard this provision

¹ So in volume 1, page 1175, General Statutes, New Jersey.

or shall alter or purposely deface the brand which may be made under the direction of this act, every such person shall forfeit and pay the sum of twenty-five dollars to such person as shall sue for the same, to be recovered in an action of debt in any court of competent jurisdiction.

PUBLIC LAWS OF 1886, Chapter 84 (General Statutes, 1895, Dairy, sections 4-22).

AN ACT to prevent deception in the sale of oleomargarine, butterine, or any imitation of dairy products, and to preserve the public health. (Approved March 22, 1886.)

Imitations of pure butter and cheese must be sold in labeled packages.

SECTION 1. That no person shall offer or expose for sale, or sell, or have in possession for the purposes of sale, any oleomargarine or butterine in imitation or semblance of natural butter or cheese, or any substance that is rendered, made, manufactured, or compounded out of any animal or vegetable or mineral fat or oil, not produced from pure milk or cream from pure milk, unless contained in or sold out of or in tubs, pails, firkins, vessels, or other packages marked and labeled as required by section three of this act.

SEC. 2. That no person shall offer or expose for sale or sell, or have in possession for the purpose of sale, any mixture or compound of natural butter or cheese with oleomargarine, butterine, suine, or any animal or vegetable or mineral fat or oil, or any substance not the product of pure milk or cream from pure milk, except such mixture or compound shall be sold out of or in or contained in tubs, firkins, pails, vessels, or packages marked or labeled as required by section three of this act.

How packages shall be marked. SEC. 3. That no oleomargarine, butterine, or suine, or any substance or compound or mixture in imitation or semblance of natural butter or cheese, or any substance that is rendered, made, manufactured, or compounded out of animal or vegetable or mineral fat or oil, not the product of pure milk or cream from pure milk, shall be sold or exposed or offered for sale, or held in possession for the purposes of sale, except when contained in tubs, pails, boxes, firkins, vessels, or other packages that are marked or labeled as follows, to wit: Every such tub, pail, box, firkin, or other vessel or package shall have painted on the outside thereof and midway between the top and bottom thereof, a stripe or band, at least three inches wide, and extending completely around said vessel or package, and said stripe or band shall be painted with black paint; every such vessel or package shall have legibly branded and burnt in, by means of a branding or burning iron, on the outside of the cover and on the outside of said vessel or package, in two places, as nearly opposite each other as possible, the words, "Oleomargarine," "Butterine," "Suine," or "Imitation butter," or "Imitation cheese," as the case may be, and said name or title shall be composed of Roman letters at least one-half an inch high and at least one-quarter of an inch broad, and said name or title shall be at least ten inches long; and every such tub, pail, box, firkin, or other vessel or package shall bear a label or shall have branded on it a mark giving the name and address of the maker of the contents thereof, and the name and location of the manufactory.

SEC. 4. (Amended by section 2. Supplement below.)

Imitations shall not be colored. SEC. 5. That no person shall offer or expose for sale, or sell, or have in possession for the purposes of sale, any oleomargarine, butterine, suine, or any substance in imitation of natural butter or cheese, or any substance that is rendered, made, manufactured, or compounded out of any animal or vegetable or mineral fat or oil, not produced from pure milk or cream from pure milk, that is colored, stained, or mixed with annatto or any other coloring matter or substance.

Butter and cheese defined. SEC. 6. That for the purposes of this act the terms "natural butter," or "natural butter or cheese," shall be taken to mean the product or products usually known by these names and which are made and manufactured exclusively from milk or cream or both, with salt or salt and rennet, and with or without coloring matter or sage; and the terms "oleomargarine," "butterine," "suine," or "substance in imitation or semblance of natural butter or cheese," shall be taken to mean any substance that is rendered, made, manufactured, or compounded out of any animal, vegetable, or mineral oil or fat, not the product of pure milk or the cream from pure milk; also, any compound or mixture of natural butter or cheese, or milk or cream, with any of these substances not milk or cream.

Evidence. SEC. 7. That the possession by any person who is either manufacturer, merchant, broker, wholesale or retail dealer, or a hotel, inn, restaurant, or boarding-house keeper of any oleaginous substance, mixture, or compound whatever as defined by this act, not natural butter, that is not contained in a tub, box, pail, or vessel, plainly marked and branded in accordance with the provisions of section three of this act, shall be *prima facie* evidence of intent to sell the same.

Effacing or cancelling marks. SEC. 8. That no person shall in any way or manner erase, cancel, or obliterate, deface, or cover over or remove either the band or stripe of paint, or the brands required by section three of this act to be placed on the tub, box, pail, or vessel containing any oleaginous substance, mixture, or compound as defined by this act.

Penalty. SEC. 9. That every person who shall violate any of the provisions of this act shall be liable to a penalty of one hundred dollars for the first offense, and two hundred dollars for each second or subsequent offense.

Powers and duties of courts, etc. SEC. 10. That every district court in any city, and every justice of the peace in any county, and any recorder in any city, is hereby empowered on oath or affirmation made according to law that any person or persons has or have violated any provision of this act, to issue process at the suit of the commissioner herein named as plaintiff for the use of the State of New Jersey, either in the manner of a summons or warrant, against the person or persons so charged, which process shall, when in the nature of a warrant, be returnable forthwith, and when in the nature of a summons, shall be returnable in not less than one nor more than ten entire days; such process shall state what provision of the law is alleged to have been violated by the defendant or defendants; and on the return of such process, or at any time to which the trial shall have been adjourned, the said court, justice of the peace, or recorder shall proceed to hear testimony and to determine and give judgment in the matter without the filing of any pleadings, for the plaintiff, for the recovery of such penalty, with costs, or for the defendant; and the said court, justice of the peace, or recorder shall, if judgment be rendered for the plaintiff, forthwith issue execution against the goods and chattels and person of the defendant or defendants; and the said court, justice of the peace, or recorder is further empowered to cause any such defendant who may refuse or neglect to pay the amount of the judgment rendered against him, and all the costs and charges incident thereto, unless an appeal is granted, to be committed to the county jail for any period not exceeding ninety days.

Officers to serve. SEC. 11. That the officers to serve and execute all process under this act shall be the officers authorized to serve and execute process in said courts, and before such magistrates and officers as aforesaid, including the constables of such counties and all police officers of such cities.

Powers of district court, justice of the peace, or recorder. SEC. 12. That said district court, justice of the peace, or recorder shall have power to adjourn the hearing or trial in any case, from time to time, not exceeding thirty days from the return of the summons or warrant, and to bail the person so charged in such sum as he shall deem proper, for his appearance at such time and place as said trial or hearing shall be adjourned to, and in default of bail to commit the person so charged to the common jail of said county, to be there detained until the trial or hearing of the charge.

Appeal. SEC. 13. That either the complainant or defendant, upon paying all costs incurred and by filing with said district court, justice, or recorder, within ten days after trial before him, a written notice of his or her intention to appeal from the decision of said court, justice, or recorder, may appeal to the next court of general quarter sessions of the peace of the county in which said complaint may have been determined, and said court of general quarter sessions shall proceed and try the same and make such adjudications as are herein provided in case of such trial before said district court, justice, or recorder.

Disposition of penalties. SEC. 14. That all penalties imposed under this act shall be immediately, on receipt, paid into the treasury of this State by the commissioner.

State dairy commissioner; term of office, salary, etc. SEC. 15. That the State board of health shall appoint a commissioner, who shall be known as the State dairy commissioner, who shall be a citizen of this State, and who shall hold his office for the term of three years

and until his successor shall be appointed; and said commissioner shall be paid a salary of two thousand dollars per annum and his traveling and other expenses, payable by the treasurer of this State, on warrant of the comptroller, in quarterly payments; and said commissioner shall be appointed within fifteen days after the passage of this act, and shall be charged with the enforcement of the various provisions thereof; and said commissioner may be removed for just cause by the appointing power conferred by this act: *Provided*, That charges shall be first made in writing and he be given time to reply thereto. And the said commissioner shall make annual reports to the legislature not later than the fifteenth day of January in each year, and also to the State board of health at its annual meeting; and said commissioner is hereby authorized and empowered to appoint or employ such assistants, chemists, etc. deemed necessary for the proper enforcement of this act, their compensation to be fixed by the commissioner.

Authorized expenditure. SEC. 16. That the said commissioner shall be authorized to expend, for the purposes of this act, an amount not exceeding ten thousand dollars in any one year, and all expenses shall be paid by the treasurer of this State, on warrant of the comptroller, upon presentation of properly certified accounts made by said commissioner; but such expenses shall not exceed in any one year the amount stated in this section.

Duties, powers, etc. SEC. 17. That the said commissioner, and assistants and clerks and agents as shall be duly commissioned so to do by the commissioner, shall have full and free access, ingress, and egress to all places of business, factories, farms, buildings, hotels, restaurants, boarding houses, carriages, cars, vessels, and cans used in the manufacture and sale of any dairy products or any imitation thereof. They shall also have the power to open any package, can, or vessel containing such articles which may be manufactured, sold, or exposed for sale in violation of the provisions of this act if they have reason to believe it is being violated, and may inspect the contents therein, and may take therefrom samples for analysis.

Purpose of act. SEC. 18. That this act and each section thereof is declared to be enacted to prevent deception in the sale of oleomargarine, butterine, or any imitation of any dairy product, and to preserve the public health.

Acts repealed. SEC. 19. That an act entitled "An act for the protection of dairy-men, and to prevent deception in sales of butter," approved February twenty-first, one thousand eight hundred and eighty-four, and an act entitled "An act to prohibit the manufacture and sale of impure and imitation dairy products," approved May fifth, one thousand eight hundred and eighty-four, and all acts and parts of acts inconsistent or in conflict with this act be, and the same are hereby, repealed.

In effect. SEC. 20. That this act shall take effect immediately.

PUBLIC LAWS OF 1887, Chapter 149. (General Statutes, 1885, Dairy, sections 23-28.)

SUPPLEMENT. (Approved April 21, 1887.)

No color permitted. SECTION 1. That nothing in said act shall be so construed as to permit the sale, or the offering or exposing for sale, or the having in possession for the purposes of sale of any oleomargarine or butterine, or any substance in imitation of natural butter, that is colored, stained, or mixed with annatto or any other coloring matter or substance.

SEC. 2. That section four of said act be, and the same is hereby, amended so as to read as follows:

Verbal and printed notice. "That no person shall sell any oleomargarine, butterine, suine, or any substance in imitation or semblance of natural butter or cheese, or any substance that is rendered, made, manufactured, or compounded out of any animal or vegetable or mineral fat or oil not produced from pure milk or the cream from pure milk, at retail or in quantities less than the original tub, firkin, or other package, unless he shall first inform the purchaser that the substance is not natural butter or cheese, but is imitation butter or cheese; and at the time of sale and with each sale he shall give to the purchaser a card or notice, printed on which shall be the name of the substance sold and the name and address of the seller or vender, and nothing else shall be printed thereon unless it be the weight of the parcel; and said notice or card shall be at least six inches long and at least four inches wide, and the printing thereon shall be in letters at

least of the size known as two-line English, and said notice or card shall be printed in black and in the English language, upon white paper, plainly and legibly, and shall be either upon the outside of the outer wrapper in which the substance is delivered to the purchaser or upon a separate card or paper attached thereto. In either case the notice shall be so placed that no part thereof shall be concealed from view."

Additional duties of dairy commissioner. SEC. 3. That the State dairy commissioner hereby directed and empowered to aid in the enforcement of the provisions of an act entitled "An act to prevent the adulteration of food or drugs," approved March twenty-fifth, one thousand eight hundred and eighty-one; and said commissioner and his assistants and agents are hereby clothed with the same powers as are conferred on inspectors or officers by the provisions of said act, and the expenses of such enforcement shall be paid out of the appropriation made for the purposes of the act to which this is a supplement.

Dairy commissioner may appoint chemists. SEC. 4. That the State dairy commissioner may appoint the chemist or chemists, analyst or analysts, required by the provisions of this act or the act to which this is a supplement, and shall fix the compensation to be paid such chemists or analysts.

Form of conviction. SEC. 5. That the conviction in prosecutions under the act to which this is a supplement shall be in the following or similar form:

STATE OF NEW JERSEY, *County of A, ss.*

Be it remembered, That on this — day of —, at —, in said county, C D, defendant, was, by the district court of the city of J (or by the recorder, or as the case is), convicted of violating the — section of "An act to prevent deception in the sale of oleomargarine, butterine, or any imitation of dairy products, and to preserve the public health," approved March twenty-second, one thousand eight hundred and eighty-six, in a summary proceeding at the suit of A B, State dairy commissioner, who sues for the use and benefit of the State of New Jersey, plaintiff, upon a complaint made by E F; and further, that the witnesses in said proceeding who testified for the plaintiff were (name them); and the witnesses who testified for the defendant were (name them); wherefore the said court (or recorder, or as the case is) doth hereby give judgment that the plaintiff recover of the defendant one hundred dollars penalty and — dollars, costs of the proceeding.

The said conviction shall be signed by the judge of the district court, recorder, or other magistrate before whom the conviction is had. In case of the infliction of a penalty of two hundred dollars the conviction shall contain a statement that it appeared that the defendant had been previously convicted of violating the said act. When an appeal is taken there shall be sent to the appellate court a copy of the complaint, summons, conviction, or judgment, and notice of appeal. The costs in prosecutions under the act to which this is a supplement shall be the same as costs in the district courts in actions on contract.

In effect. SEC. 6. That this act shall take effect on May first, one thousand eight hundred and eighty-seven.

PUBLIC LAWS OF 1895, Chapter 332. (General Statutes, 1895, Dairy, sections 29, 30.)

SUPPLEMENT. (Approved March 25, 1895.)

Manufacture and sale of imitation butter forbidden.

SECTION 1. That no person, by himself or his agents or servants, nor as an agent or servant, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product, or compound made wholly or partly out of any fat, oil, or oleaginous substance or compound thereof not produced from unadulterated milk or cream from the same, which shall be artificially colored in imitation or semblance of yellow butter produced from pure, unadulterated milk or cream of the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in the manner regulated by the act to which this is a supplement, and in such manner as will advise the consumer of its real character, free from artificial color that cause it to look like butter.

Penalty. SEC. 2. That any person or persons who shall sell any article mentioned in the preceding section of this act, representing the same as butter made from unadulterated milk or cream or any product other than it really is, except in

the manner provided in existing laws, shall be guilty of a misdemeanor, and upon conviction thereof be punished by imprisonment not exceeding six months or a penalty of two hundred dollars, in the discretion of the committing magistrate or court.

PUBLIC LAWS OF 1895, Chapter 418. (General Statutes, 1895, Dairy, sections 31, 32.)

AN ACT relative to the dairy commissioner. (Approved June 13, 1895.)

Appropriation, how expended by dairy commissioner. SECTION 1. That the sum hereafter annually appropriated may be expended by the dairy commissioner in the enforcement of the several laws regulating the sale of milk, butterine, oleomargarine, food, and drugs, from which sum the salary of the dairy commissioner shall be paid; and he shall hereafter monthly submit his accounts and vouchers to the State board of health, who shall audit and approve the same, and the same shall be paid by warrants drawn by the comptroller, made payable directly to the several persons employed by the dairy commissioner, except in the case of small and incidental expenses, in which cases the dairy commissioner may present bills in his own name.

Repealed. SEC. 2. That all acts and parts of acts inconsistent with this act be, and are hereby, repealed, and that this act shall take effect November first, eighteen hundred and ninety-five.

PUBLIC LAWS OF 1893, Chapter 207 (General Statutes, 1895, Animals, sections 113-115).

SUPPLEMENT to an act entitled "An act concerning contagious and infectious diseases among animals, and to repeal certain acts relating thereto," approved April fourth, one thousand eight hundred and eighty-six. (Approved March 16, 1893.)

Registry of cattle to be kept in cities. SECTION 1. That the local board of health of any city of this State shall by ordinance require from time to time a registry of all cattle kept within the limits of said city, which registry shall state the place of keeping, the number in each case kept, and the number of these intended or used as milch cows; and it shall be the duty of the owner of any such cattle to make registry thereof at the time, place, and in the manner that the board of health of said city may direct, under a penalty not exceeding fifty dollars for any neglect of the same: *Provided*, That no such registry shall be made by any board of health until after the examination of the stables and place in which said cattle are kept, and until it is known to the satisfaction of said board that they are in good sanitary condition.

When inspection shall be ordered. SEC. 2. That whenever any local board of health of any city shall have reason to suspect the existence of any contagious disease among cattle, or such as may be a risk or danger to the food or milk supply, or whenever they may deem it necessary in order to prevent the occurrence of such risk or danger, they shall order the inspection of all cattle that are kept or intended for meat or milk production, by a competent veterinarian chosen by them, and may for such inspection require so much payment for such service as may be necessary for the expenses attending such inspection: *It being, however, provided*, That in no case shall the amount charged exceed fifty cents a head per year for dairies of ten cows or under, and for all dairies above ten cows twenty-five cents per head per year: *Provided further*, That no charge shall be made against anyone keeping a single cow for family use.

When State dairy commissioner shall be notified, and his duties. SEC. 3. That whenever any local board of health, or any veterinary inspector appointed by said board, shall find or suspect any disease in any cow, or in any herd of milk-producing cattle, which may prove harmful to the meat or milk supply, the State board of health and the State dairy commissioner shall be notified, and it shall be the duty of the dairy commissioner to investigate the same, and he shall prohibit the sale or use of the milk from any such milch cow; but he, or the owner of said milch cow, may ask, through the State board of health, a report from some veterinarian appointed by the State board of health as to whether or how long it will be necessary to continue the prohibition of the use of said milk, and the dairy commissioner or the State board of health may prohibit the use of said milk or of meat of any animal declared by a veterinarian of the State board to be unfit for use.

In effect. SEC. 4. That this act shall take effect immediately.

PUBLIC LAWS OF 1881, page 283 (General Statutes, 1886, Dairy, sections 74-81.)

AN ACT to prevent the adulteration of food or drugs. (Approved March 25, 1881.)

SECTION 1. (Amended by supplement which is given below.)

Food defined. SEC. 2. That the term "food," as used in this act, shall include every article used for food or drink by man, and that the term "drugs," as used in this act, shall include all medicines for internal or external use.

SEC. 3. That any article shall be deemed to be adulterated, within the meaning of this act: (a) In the case of drugs.

* * * * *

Adulterated food defined. (b) In the case of food or drink. First, if any substance or substances has or have been mixed with it so as to reduce or lower or injuriously affect its quality or strength; second, if any inferior or cheaper substance or substances have been substituted wholly or in part for the article; third, if any valuable constituent of the article has been wholly or in part abstracted; fourth, if it be an imitation of or be sold under the name of another article; fifth, if it consists wholly or in part of a diseased or decomposed or putrid or rotten animal or vegetable substance, whether manufactured or not, or in case of milk, if it is the product of a diseased animal; sixth, if it be colored or coated, or polished, or powdered, whereby damage is concealed, or it is made to appear better than it really is, or of greater value; seventh, if it contain any added poisonous ingredient or any ingredient which may render such article injurious to the health of a person consuming it: *Provided*, That the State board of health may, with the approval of the governor, from time to time declare certain articles or preparations to be exempt from the provisions of this act: *And provided further*, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles of food, provided that the same are not injurious to health and that the articles are distinctly labeled as a mixture.

Standards to be made by board of health. SEC. 4. That the State board of health shall, from time to time, fix the limits of variability permissible in any articles of food or drug or compound, the standard of which is not established by any national pharmacopoeia.

SEC. 5. (Amended by supplement.)

SEC. 6. (Amended by supplement.)

SEC. 7. (Amended by supplement.)

Repealing clause. SEC. 8. That any acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

PUBLIC LAWS OF 1883, page 185 (General Statutes 1886, Dairy, sections 82-90).

SUPPLEMENT. (Approved March 23, 1883.)

SECTION 1. That section one of the act to which this is a supplement be amended so as to read as follows:

Adulterated food prohibited. That no person shall manufacture, have, offer for sale, or sell any article of food or drugs which is adulterated within the meaning of this act, and any person violating any of the provisions of this act shall be liable to a penalty of fifty dollars for a first offense and one hundred dollars for a second or any subsequent offense.

SEC. 2. That section five of the act to which this is a supplement be amended so as to read as follows:

Board of health to make inspections, etc. That the State board shall take cognizance of the interest of the public health as it relates to the sale of foods and drugs and the adulteration of the same, and make all necessary inquiries and investigations relating thereto; it shall also have the appointment and supervision of public analysts and chemists or inspectors to serve for general service, or for such special service or length of time as it may deem necessary, and the board of health shall from time to time meet and adopt such measures as it may deem necessary for the enforcement of this act and of the act to which it is a supplement, and prepare rules and regulations with regard to the proper method of collecting and examining articles of food or drugs; and the analysts, chemists, or inspectors appointed may act singly or as associated in a council for such time as may be approved or authorized by said board.

SEC. 3. That section seven of the act to which this is a supplement be amended so as to read as follows:

Penalty. That any person violating any of the provisions of this act, and any person who shall hinder, impede, obstruct, or otherwise prevent any analyst, inspector, or prosecuting officer in the performance of his duty, shall be liable to a penalty of fifty dollars for the first offense and one hundred dollars for a second or subsequent offense.

Officers to issue process. **SEC. 4.** That every district court in any city, and every justice of the peace in any county, and any police justice or recorder in any city, is hereby empowered, on oath or affirmation made according to law that any person or persons has or have violated any provision of the act to which this is a supplement, to issue process at the suit of any person, either in the manner of a summons or warrant, against the person or persons so charged, which process shall, when in the nature of a warrant, be returnable forthwith, and when in the nature of a summons shall be returnable in not less than one nor more than ten entire days. Such process shall state what provision of the law is alleged to have been violated by the defendant or defendants, and on the return of such process at any time to which the trial shall have been adjourned, the said court, justice

Testimony. of the peace, police justice or recorder shall proceed to hear testimony and to determine and give judgment in the matter without the filing of any pleadings; and the said court, justice of the peace, police justice or recorder shall, if judgment be rendered for the plaintiff, forthwith issue execution against the goods and chattels and person of the defendant or defendants; and the said court, justice of the peace, police justice or recorder is further empowered to cause any such defendant who may refuse or neglect to pay the amount of the judgment rendered against him, and all the costs and charges incident thereto,

Penalty. unless an appeal is granted, to be committed to the county jail for any period not exceeding ninety days; but no district court of any city, justice of the peace, police justice or recorder shall have jurisdiction of any offense against the act to which this is a supplement which offense shall take place outside of the territorial jurisdiction of such district court, justice of the peace, police justice or recorder, as such territorial jurisdiction is now established by law.

Officers to serve process. **SEC. 5.** That the officers to serve and execute all process under this act shall be the officers authorized to serve and execute process in said courts, and before such magistrates and officers as aforesaid, including the constables of such counties and all police officers of such cities.

Disposition of penalties. **SEC. 6.** That all penalties imposed under the act to which this is a supplement shall be disposed of as follows: In case the suit is brought by any officer appointed by the State board of health, the penalty shall be paid into the treasury of this State; in case the suit is brought by an officer of any local board of health of any city, borough, town, or township, the penalty shall be paid into the treasury of said local board of health, city, borough, town, or township; in case of any suit not otherwise provided for, the penalty shall be paid to the person bringing the suit.

Additional appropriation. **SEC. 7.** That the State board of health shall be authorized to expend annually, in addition to all sums already appropriated for such board, an amount not exceeding one thousand dollars for the purpose of including in its work the carrying out of the provisions of this act and for the protection of the public health.

Powers of inspectors. **SEC. 8.** That any analyst or inspector appointed by the State board of health, and any inspector or other officer of any local board of health, shall have power to inspect any article of food or drugs, wherever exposed for sale, or offered or held for sale, or whether in transit or otherwise; and if, upon inspection of such food or drugs, the same shall be found adulterated within the meaning of this act, or the act to which this act is a supplement, the said inspector or other officers aforesaid shall have power and may prohibit the sale or disposal of said articles until decision shall be rendered by the court, justice of the peace, recorder, or police justice before whom the defendant may be brought.

SEC. 9. That this act shall not be so construed as to interfere with the special provisions of an act approved March fourth, eighteen hundred and eighty-two, entitled "An act to prevent the adulteration and to regulate the sale of milk."

In effect. **SEC. 10.** That this act shall take effect immediately.

PUBLIC LAWS OF 1897.

Supplement to Chapter 93. (Approved April 8, 1897.)

SECTION 1. That the sixth section of the act to which this is a supplement is amended so that the same shall read as follows:

Samples to be given. That every person selling, or offering or exposing any article of food or drugs for sale, or delivering any article to purchasers, shall be bound to serve or supply any inspector appointed under this act, who shall apply to him for that purpose and on his tendering the value of the same, a sample sufficient for the purpose of analysis of any article of food or drugs, and which is in the possession of the person selling, under a penalty not exceeding fifty

Penalty. dollars for a first offense and one hundred dollars for a second and subsequent offense; said inspector shall at the time of the sale, in the presence of the person selling, divide said sample into two parts, and shall duly

Duplicate samples. seal each part in a suitable can, vessel, or package, and shall tender, and if accepted shall deliver, at the time of taking said sample, one part to the person selling with a statement in writing of the cause of the sample having been taken, and in any prosecution of the seller of any food or drugs for violation of any statute of this State relative thereto, no proof of the result of any analysis thereof shall be given in evidence by the prosecutor unless a part of the sample of the article complained of shall have been sealed up and tendered to the seller as aforesaid.

In effect. SEC. 2. This act shall take effect immediately.

LAWS OF 1897, Chapter 123, page 160. (General Statutes 1895, Dairy, section 91.)

SUPPLEMENT. (Approved April 11, 1897.)

Dairy commissioner to assist in enforcement. **SECTION 1.** That the State dairy commissioner is hereby directed and empowered to aid in the enforcement of the provisions of the act to which this is a supplement; and said commissioner and his assistants duly commissioned shall be, and are hereby, made inspectors under the act to which this act is a supplement. The expense of enforcing said act shall be paid out of the appropriation already made for the use of said dairy commissioner for the enforcement of the act of March twenty-second, one thousand eight hundred and eighty-six, entitled "An act to prevent deception in the sale of oleomargarine, butterine, or any imitation of dairy products, and to preserve the public health."

In effect. SEC. 2. That this act shall take effect immediately.

NEW MEXICO.

COMPILED LAWS OF 1897.¹

Sale damaged provisions; penalty. **SECTION 1244.** If any person knowingly shall sell any kind of damaged, spoiled, or unhealthy provisions, either for food or drink, without giving sufficient notice to the purchaser of the same, he shall be fined in a sum not exceeding five hundred dollars, or by imprisonment in the county jail not exceeding six months.

Food or drugs not to be adulterated. **SEC. 1246.** That no person within the Territory of New Mexico shall mix, color, stain, or powder, or permit any other person to mix, color, stain, or powder any article of food or drugs with any ingredient or material so as to render the article injurious to health, or manufacture any article of food which shall be composed in whole or in part of diseased, decomposed, offensive, or unclean animal or vegetable substance, with the intent that the same may be sold in the said Territory, and no person shall sell in the Territory of New Mexico any such article so mixed, colored, stained, powdered, or manufactured. Any person violating this section shall be guilty of a misdemeanor, and for each offense to be fined not exceeding two hundred dollars for the first offense, and for each subsequent offense not exceeding three hundred dollars, or imprisonment not exceeding one year, or both, in the discretion of the court.

¹ Sections 1244, 1246—C. L., 1895, c. 56, sections 8, 9, February 15, 1884. Sections 1243-1257—c. 129 L. 89, sections 1-11, February 28. Section 2402—c. 39, L. 84, section 13. April 1.

Scienter to be proved. SEC. 1248. That no person shall be liable to be convicted under either of the two last foregoing sections in respect to the sale of any article of food or of any drug if he shows to the satisfaction of the court before whom he is charged that he did not know of the article of food or drug sold by him being so mixed, colored, stained, or powdered as in either of those sections mentioned, and that he could not, with reasonable diligence, have obtained that knowledge.

Quality of food to be as represented. SEC. 1249. That no person shall sell in the Territory of New Mexico any article of food or drug which is not of the nature, substance, and quality of the article demanded by any purchaser, and any person violating this section shall be guilty of a misdemeanor, and for the first offense be fined not exceeding fifty dollars, and for each subsequent offense not exceeding one hundred dollars, or imprisonment not exceeding six months, or both, in the discretion of the court: *Provided*, That an offense shall not be deemed to be committed under this section in the following cases—that is to say:

First. Where any matter or ingredient not injurious to health has been added to the food or drug because the same is required for the production or preparation thereof as an article of commerce in a state fit for carriage or consumption and not fraudulently to increase the bulk, weight, or measure of the food or drug or conceal the inferior quality thereof.

Second. Where the food or drug is a proprietary medicine.

Third. Where the food or drug is compounded as authorized by this act.

Fourth. Where the food or drug is unavoidably mixed with some extraneous matter in the process of collection or preparation.

Compound articles to be in accordance with demand of purchaser; penalty.

SEC. 1250. That no person shall sell in the Territory of New Mexico any compound article of food or compounded drug which is not composed of ingredients in accordance with the demand of the purchaser. Any person violating this section shall be guilty of a misdemeanor and fined not exceeding fifty dollars: *Provided*, That no person shall be guilty of any such offense as aforesaid in respect of the sale of an article of food or a drug mixed with any matter or ingredient not injurious to health and not intended fraudulently to increase its bulk, weight, or measure, or conceal its inferior quality, if at the time of delivering such article or drug he shall supply to the person receiving the same a notice, by a label distinctly and legibly written or printed on or with the article or drug, to the effect that the same is mixed.

Altered food; alteration to be disclosed. SEC. 1251. That no person shall in the Territory of New Mexico, with the intent that the same may be sold in its altered state without notice, subtract from any article of food any part of it so as to affect injuriously its quality, substance, or nature; and no person shall sell any article so altered without making disclosure of the alteration; and any person violating the provisions of this section shall be guilty of a misdemeanor and fined not exceeding one hundred dollars.

Proviso to be proved. SEC. 1252. That in any prosecution under this act, where the fact of an article having been sold in a mixed state has been proved, if the defendant shall desire to reply upon proviso contained in this act it shall be incumbent upon him to prove the same.

Belief in parity, to discharge. SEC. 1253. That if the defendant in any prosecution under this act prove to the satisfaction of the court that he had purchased the article in question as the same in nature, substance, and quality as that demanded of him by the purchaser, and with a written warranty to that effect; that he had no reason to believe at the time when he sold it that the article was otherwise, and that he sold in the same state as when he purchased it, he shall be discharged from the prosecution.

Forged warranty a misdemeanor. SEC. 1254. That any person who shall forge, or shall, after knowing it to be forged, use any certificate or any writing purporting to contain a warranty, as provided in section one thousand two hundred and fifty-three, shall be guilty of a misdemeanor and be punishable on conviction by imprisonment for a term not exceeding one year with hard labor.

False warranty a misdemeanor; penalty. SEC. 1255. That every person who shall willfully apply to any article of food or a drug a certificate of warranty given in relation to any other article or drug, or who shall give a false warranty in writing to any purchaser in respect of an article of food or a drug by him as principal or agent, or who shall willfully give a label with any

article sold by him which shall falsely describe the article sold shall be guilty of a misdemeanor, and on conviction be fined not to exceed one hundred dollars.

Definitions. SEC. 1256. That the term food as used in this act shall include every article used for food or drink by man other than drugs or water. The term drug as used in this act shall include all medicines for internal or external use.

Governor may exempt certain articles. SEC. 1257. That the governor may from time to time declare certain articles or preparations to be exempt from the provisions of this act, and it shall be the duty of the secretary of the Territory to prepare and publish from time to time a list of the articles, mixtures, or compounds declared to be exempt from the provisions of this act in accordance with this section.

COMPILED LAWS OF 1897, Title XXVIII, Municipal Corporations, Chapter II.

Powers defined. SECTION 2402. The city council and board of trustees in towns shall have the following powers:

* * * * *

Regulation of sales. Twenty-first. To regulate the sale of meats, poultry, fish, butter, cheese, lard, vegetables, and all other provisions, and to provide for place and manner of selling the same.

* * * * *

Inspection. Twenty-third. To provide and regulate the inspection of meats, poultry, fish, butter, cheese, lard, vegetables, flour, meal, and other provisions.

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NEW YORK.

LAWS OF 1893, Chapter 338.

AN ACT in relation to agriculture, constituting articles one, two, three, four, and five of chapter thirty-three of the general laws. (Approved April 10, 1893.)

Chapter 33 of the General Laws.

Article 1. General provisions (sections 1-12). Article 2. Dairy products (sections 20-37).

* * * * *

Article 1.

Short title. SECTION 1. This chapter shall be known as the agricultural law.

Department of agriculture. SEC. 2. There shall be a department of the State government known as the department of agriculture, which shall be charged with the execution of the laws relating to agriculture and agricultural products. The commissioner of agriculture shall be the chief of the department.

Commissioner of agriculture. The New York State dairy commissioner shall be the commissioner of agriculture until his successor shall be appointed and qualified. The commissioner of agriculture shall be appointed by the governor, by and with the advice and consent of the senate. His term of office shall be three years. He shall be paid an annual salary of four thousand

Salary. dollars and his necessary expenses not to exceed five hundred dollars, incurred in the discharge of his official duties. He may appoint a director of

Assistants. farmers' institutes and such clerks and assistant commissioners and employ such clerks, chemists, agents, and counsel as he may deem necessary for the proper enforcement of such laws and the proper administration of the department, who shall receive such compensation as may be fixed by him and their necessary expenses. The compensation of his clerks, assistants, and other persons employed by him and such necessary expenses shall be paid on his certificate by the treasurer on the warrant of the comptroller. All other charges, accounts, and expenses of the department authorized by law shall be paid by the treasurer on the warrant of the comptroller, after they have been audited and allowed by the comptroller. The trustees of public buildings shall furnish suitable rooms for the use of the department in the new capitol.

Powers of commissioner, his assistant, and employees. The commissioner of agriculture, his clerks, assistants, experts, chemists, agents, and counsel employed by him, shall have full access to all places of business, factories, farms, buildings, carriages, cars, and vessels used in the manufacture, sale, or transportation within the State of any dairy products or any imitation thereof, or of any article or product with respect to which any authority is conferred by this chapter on such commissioner. They may examine and open any package, can, or vessel containing or believed to contain any article or product which may be manufactured, sold or exposed for sale in violation of the provisions of this chapter, and may inspect the contents therein, and take therefrom samples for analysis.

Expert butter and cheese makers. SEC. 4. The commissioner of agriculture may appoint and employ not more than five expert butter and cheese makers, who shall, under his direction, examine and inspect butter and cheese factories and attend at agricultural fairs, societies, and meetings designated by the commissioner, to impart thereat information as to the best and most approved method of making butter and cheese and improving the quality thereof.

Annual report. SEC. 5. The commissioner of agriculture shall make an annual report to the legislature on or before January fifteenth of his work and proceedings for the year ending September thirtieth next preceding, which shall include a statement in detail of the number of assistant commissioners, chemists, experts, agents, and counsel employed under the provisions of this chapter during such year, and their compensation, expenses, and disbursements; and also a statement in detail of the expenditures of moneys appropriated for the State Agricultural Society, the county agricultural societies, and the New York Agricultural Experiment Station, and other agricultural purposes, and estimates of the amounts required for all such purposes for the ensuing year. He may require the State Agricultural Society and the county agricultural societies to make reports to him and prescribe the form of such reports.

Certificate of chemist presumptive evidence. SEC. 6. Every certificate, duly signed and acknowledged, of a chemist, analyst, or other expert employed by the commissioner of agriculture, or any analysis, examination, or investigation made by such analyst, chemist, or expert with respect to any matter or product which the commissioner has authority to examine or cause to be examined, shall be presumptive evidence of the facts therein stated.

Evidence; principal's liability for act of agent. SEC. 7. The doing of anything prohibited by this chapter shall be evidence of the violation of the provisions of this chapter relating to the thing so prohibited, and the omission to do anything directed to be done shall be evidence of a violation of the provisions of the chapter relative to the thing so directed to be done. The intent of any person doing or omitting to do any such act is immaterial in any prosecution for a violation of the provisions of this chapter. Any person who suffers, permits, or allows any violation of the provisions of this chapter by his agent or servant, or in any room or building occupied or controlled by him, shall be deemed a principal in such violation and liable accordingly.

Prosecution for penalties. SEC. 8. Whenever the commissioner of agriculture shall know or have reason to believe that any penalty has been incurred by any person for a violation of any of the provisions of this chapter, or that any sum has been forfeited by reason of any such violation, he may cause an action or proceeding to be brought in the name of the people for the recovery of the same.

Disposal of fines and moneys recovered. SEC. 9. One-half of all moneys recovered, either as penalties, forfeitures, or otherwise, for the violation of any of the provisions of this chapter, and from fines imposed as a punishment for any criminal offense committed in violation of the provisions of this chapter, or of the penal code relating to the punishment of criminal offenses committed in violation of the provisions of law for the prevention of frauds in the manufacture or sale of any of the articles or products to which this chapter relates, shall be paid by the court or the clerk thereof to the city or county where the recovery shall be had or fine collected, for the benefit of the poor of such city or county, except in the city and county of New York and the city of Brooklyn, where the same shall be paid to the proper authorities, and equally divided by them between the pension funds of the police and fire departments. The residue of such moneys shall be paid into the treasury of the State and paid out by the

treasurer, upon the warrant of the comptroller, for the purpose of defraying the expenses of the department of agriculture, audited by the comptroller. The same disposal shall be made of all moneys recovered upon any bond given by any officer by virtue of the provisions of this chapter.

When injunctions may be obtained. SEC. 10. In an action in the supreme court for the recovery of a penalty or forfeiture incurred for the violation of any of the provisions of this chapter, an application may be made on the part of the people to the court or any justice thereof for an injunction to restrain the defendant, his agents, and employees from the further violation of such provisions. The court or justice to whom such application may be made shall grant such injunction on proof, by affidavit, that the defendant has been guilty of the violations alleged in the complaint, or of a violation of any such provision subsequent to the commencement of the action, and in the same manner as injunctions are usually granted under the rules and practice of the court. No security on the part of the plaintiff shall be required, and costs of the application may be granted or refused in the discretion of the court or justice. If the plaintiff shall recover judgment in the action for any penalty or forfeiture demanded in the complaint, the judgment shall contain a permanent injunction restraining the defendant, his agents, and employees from any further violation of such provision of this chapter. Any injunction, order, or judgment obtained under this section may be served on the defendant by posting the same upon the outer door of the defendant's usual place of business, or where such violation was or may be committed, or in the manner required by the code of civil procedure and the rules and practice of the court. Personal service of the injunction shall not be necessary when such service can not be secured with reasonable diligence, but the service herein provided shall be deemed sufficient in any proceeding for the violation of such injunction.

When prosecution shall not be compelled to elect. SEC. 11. In an action for a penalty or forfeiture incurred by reason of the violation of the provisions of this chapter, when the complaint charges a violation of any two or all of such provisions, the plaintiff shall not be compelled to elect between the counts under such different provisions, but shall be entitled to recover if it is found that a violation of any one of such provisions has been committed for which a penalty or forfeiture is imposed.

Inspection, how conducted. SEC. 12. When the commissioner of agriculture, an assistant commissioner, or any person or officer authorized by the commissioner or by this chapter to examine or inspect any product manufactured or offered for sale shall in discharge of his duties take samples of such product, he shall take duplicate samples thereof in the presence of at least one witness, and he shall in the presence of such witness seal both of such samples, and shall tender, and, if accepted, deliver at the time of taking, one sample to the manufacturer or vendor of such product, or to the person having custody of the same, with a statement in writing of the cause of the taking of the sample.

Article 2.

Definitions of butter and cheese. SEC. 20. The terms butter and cheese, when used in this article, mean the product of the dairy, usually known by those terms, which are manufactured exclusively from pure, unadulterated milk or cream or both, with or without salt or rennet, and with or without coloring matter or sage. The terms oleomargarine, butterine, imitation butter, or oleomargarine, etc.; imitation cheese shall be construed to mean any article or substance in the semblance of butter or cheese not the usual product of the dairy and not made exclusively of pure and unadulterated milk or cream, or any such article or substance into which any oil, lard, or fat not produced from milk or cream enters as a component part, or into which melted butter or butter in any condition or state, or any oil thereof, has been introduced to take the place of cream. The term adulterated milk, when so used, means—

1. Milk containing more than eighty-eight per centum of water or fluids.
2. Milk containing less than twelve per centum of milk solids.
3. Milk containing less than three per centum of fats.
4. Milk drawn from cows within fifteen days before and five days after parturition.
5. Milk drawn from animals fed on distillery waste or any substance in a state of fermentation or putrefaction or on any unhealthy food.
6. Milk drawn from cows kept in a crowded or unhealthy condition.

7. Milk from which any part of the cream has been removed.

8. Milk which has been diluted with water or any other fluid, or to which has been added or into which has been introduced any foreign substance whatever.

All adulterated milk shall be deemed unclean, unhealthy, impure, and unwholesome. The terms pure milk or unadulterated milk, when used singly or together, mean sweet milk not adulterated, and the terms pure cream or unadulterated cream, when used singly or together, mean cream taken from pure and unadulterated milk.

Care and feed of cows. SEC. 21. No person shall keep cows, for the production of milk for market or for sale or exchange or for manufacturing the milk or cream from the same into any article of food, in a crowded or unhealthy condition, or feed any such cows on distillery waste, or on any substance in the state of putrefaction or fermentation, or upon any food that is unhealthy or that produces impure, unhealthy, diseased, or unwholesome milk. But this section shall not be construed to prohibit the feeding of ensilage.

Prohibition of the sale of adulterated milk. SEC. 22. No person shall sell or exchange, offer or expose for sale or exchange, any unclean, impure, unhealthy, adulterated, or unwholesome milk, or any cream from the same, or sell or exchange, or offer or expose for sale or exchange, any article of food made from such milk, or of or from cream from the same, or manufacture from any such milk or cream from the same any article of food.

Regulations in regard to butter and cheese factories. SEC. 23. No person shall sell, supply, or bring to be manufactured to any butter or cheese factory any milk diluted with water, or any unclean, impure, unhealthy, adulterated, or unwholesome milk, or milk from which any of the cream has been taken, except pure skim milk to skim-cheese factories.

Delivery of impure milk. No person shall sell, supply, or bring to be manufactured to any butter or cheese factory any milk from which there has been kept back any part of the milk commonly known as strippings, or any milk that is sour, except pure skim milk to skim-cheese factories. The owner or proprietor or the persons having charge of any butter or cheese factory, not buying

Use of milk by operators. all the milk used by him, shall not use for his own benefit, or allow any of his employees or any other person to use for his own benefit, any milk, cream, butter, or cheese or any other product thereof, brought to such factory, without the consent of the owners of such milk or the products thereof. Every butter or cheese manufacturer not

Account of operations. buying all the milk he uses shall keep a correct account of all the milk daily received, of the number of packages of butter and cheese made each day, and the number of packages and aggregate weight of cheese and butter disposed of each day; which account shall be open to inspection to any person who delivers milk to such factory.

Cans to be branded with the name of county. SEC. 24. No person shall sell, or offer or expose for sale or exchange, any milk, except in the county where produced, unless each can, vessel, or package containing such milk shall be distinctly and durably branded with letters not less than one inch in length and of a suitable width to correspond with such length, and with suitable spaces between the letters, on the outside, above the center, on every can, vessel, or package containing such milk, the name of the county from which the same is produced; and the same letters shall be branded or painted in a conspicuous place on the carriage or vehicle in which the milk is drawn to be sold; and such milk shall not be sold by the producer outside of the county in which it is produced, except in or out of a can, vessel, package, or carriage, or vehicle so marked. The foregoing prohibitions and provisions of this section shall not apply

Glass jars to be branded with name of vendor. when milk is sold or delivered in glass bottles. No milk shall be sold or delivered in glass bottles, except in the county where produced, unless such bottles shall have legibly blown, stamped, engraved, etched, impressed, or moulded in the glass, or otherwise produced upon such bottles, the name of the vendor, or the same is on a label or cover affixed thereto, or there is some mark or device on or affixed to such bottles by which the vendor may be ascertained.

Regulations in regard to condensed milk. SEC. 25 (as amended by section 1 of chapter 143 of the laws of 1894). No condensed milk shall be made, or offered or exposed for sale or exchange, unless manufactured from pure, clean, healthy, fresh, unadulterated, and wholesome milk from which the cream has not been removed either wholly or in part, or unless the proportion of milk solids shall be in quantity the equivalent of twelve per centum of milk solids

in crude milk, and of which solids twenty-five per centum shall be fats. No person shall manufacture, sell or offer for sale or exchange in hermetically sealed cans, any condensed milk unless put up in packages upon which shall be distinctly labeled or stamped the name of the person or corporation by whom made and the brand by which or under which it is made. When condensed milk shall be sold from cans or packages not hermetically sealed the vendor shall brand or label such cans or packages with the name of the manufacturer of the milk contained therein.

Manufacture and sale of imitation butter prohibited. SEC. 26 (as amended by section 1 of chapter 768 of the laws of 1897). No person by himself, his agents, or employees, shall produce or manufacture out of or from any animal fats or animal or vegetable oils not produced from unadulterated milk or cream from the same, the article known as oleomargarine or any article or product in imitation or semblance of natural butter produced from pure unadulterated milk or cream of the same; or mix, compound with, or add to milk, cream, or butter any acids or other deleterious substance or any animal fats or animal or vegetable oils not produced from milk or cream, so as to produce any article or substance or any human food in imitation or in semblance of natural butter, nor sell, keep for sale, or offer for sale any article, substance, or compound made, manufactured, or produced in violation of the provisions of this section, whether such article, substance, or compound shall be made or produced in this State or elsewhere. Any dealer in any article or product, the manufacture or sale of which is prohibited by this act, who shall keep, store, or display such article or product, with other merchandise or stock in his place of business, shall be deemed to have the same in his possession for sale.

Mixing of animal fats with milk, cream, or butter prohibited. SEC. 27. No person shall manufacture, mix, or compound with or add to natural milk, cream, or butter any animal fats or animal or vegetable oils, nor make or manufacture any oleaginous substance not produced from milk or cream with intent to sell the same as butter or cheese made from unadulterated milk or cream or have the same in his possession with such intent; nor shall any person solicit or take orders for the same or offer the same for sale, nor shall any such article or substance or compound so made or produced be sold as and for butter or cheese, the product of the dairy. No person shall coat, powder, or color with annatto or any coloring matter whatever, butterine or oleomargarine or any compound of the same or any product or manufacture made in whole or in part from animal fats or animal or vegetable oils not produced from unadulterated milk or cream, by means of which such product, manufacture, or compound shall resemble butter or cheese, the product of the dairy; nor shall he have the same in his possession with intent to sell the same, nor shall he sell or offer to sell the same.

Prohibited articles not to be furnished. SEC. 28. No keeper or proprietor of any bakery, hotel, boarding house, restaurant, saloon, lunch counter, or place of public entertainment, or any person having charge thereof or employed thereat, or any person furnishing board for any others than members of his own family, or for any employees where such board is furnished for a compensation or as part of the compensation of any such employee, shall keep, use, or serve therein either as food for his guests, boarders, patrons, customers or employees, or for cooking purposes any article or substance made in violation of the provisions of this article.

Use of coloring matter prohibited. SEC. 29. No person manufacturing with intent to sell any substance or article in imitation or semblance of butter or cheese not made exclusively from unadulterated milk or cream or both, with salt or rennet or both, and with or without coloring matter or sage, but into which any animal, intestinal, or offal fats, or any oils or fats or oleaginous substance of any kind not produced from pure, unadulterated milk or cream, or into which melted butter, or butter in any condition or state or any modification of the same, or lard or tallow shall be introduced, shall add thereto or combine therewith any annatto or compounds of the same, or any other substance or substances whatever, for the purpose or with the effect of imparting thereto a color resembling yellow, or any shade of yellow butter or cheese, nor introduce any such coloring matter or other substance into any of the articles of which the same is composed.

Manufacture and sale of imitation cheese prohibited. SEC. 30. No person shall manufacture, deal in, sell, offer or expose for sale or exchange any article or substance, in the semblance of or in imitation of cheese made exclusively of unadulterated milk or cream, or both, into

which any animal, intestinal, or offal fats or oils, or melted butter or butter in any condition or state or modification of the same, or oleaginous substances of any kind not produced from unadulterated milk or cream, shall be introduced.

When prohibitions do not apply to skim milk or skim cheese.

SEC. 31. Except in the counties of New York and Kings, the prohibitions contained in this article against the sale of adulterated milk shall not apply to skim milk, which is clean, pure, healthy, wholesome and unadulterated, except by skimming, sold for use in the county in which it is produced or an adjoining county, if it is sold for and as skimmed milk. The prohibitions in this article against the sale of cheese made from unadulterated milk or cream shall not apply to pure skim cheese made from milk which is clean, pure, healthy, wholesome, and unadulterated, except by skimming.

Unclean vessels or surroundings for milk prohibited.

SEC. 32 (as amended by chapter 153, 1898). No person, firm, association, or corporation buying or receiving milk not produced from the dairy of such person, firm, association, or corporation, for the purpose of selling the same for consumption as such, or for manufacturing the same into butter, cheese, condensed milk, or other human food, shall keep the same in utensils, cans, vessels, room or rooms, building or buildings, that are unclean or that have unsanitary surroundings or drainage, or in any condition whatsoever that would tend to produce or promote conditions favorable to unhealthfulness or disease. The commissioner of agriculture shall notify all persons, firms, associations, or corporations violating this section to clean said utensils, cans, vessels, room or rooms, building or buildings, or to so improve the sanitary conditions that the law will not be violated; and if such notice is complied with in ten days' time, Sundays excepted, then no action shall lie for a violation of this section. The provisions of this act shall not apply to cities of the first class.

Manufacturer's brand of cheese.

SEC. 33. Every manufacturer of full-milk cheese may put a brand upon each cheese indicating "full milk cheese," and the date of the month and year when made, and no person shall use such a brand upon any cheese made from milk from which any of the cream has been taken. The commissioner of agriculture shall procure and issue to the cheese manufacturers of the State on proper application therefor and under such regulations as to the custody and use thereof as he may prescribe, a uniform stencil brand, bearing a suitable device or motto, and the words "New York State full-cream cheese." Every such brand shall be used upon the outside of the cheese and shall bear a different number for each separate factory. The commissioner shall keep a book in which shall be registered the name, location, and number of each manufactory using the brand, and the name or names of the persons at each manufactory authorized to use the same. No such brand shall be used upon any other than full-cream cheese or packages containing the same.

Use of false brand prohibited.

SEC. 34. No person shall offer, sell, or expose for sale in any package butter or cheese which is falsely branded or labeled.

County trade-marks.

SEC. 35. At a regular or special meeting of a county dairymen's association in any county of the State there may be adopted a county trade-mark, by a majority of the members present and voting, to be used as a trade-mark by any [any] person manufacturing pure unadulterated butter or full-cream cheese in such county. The secretary of the association shall forthwith send to the commissioner of agriculture a copy of such trade-mark, which copy he shall place on file in his office, noting thereupon the day and hour he received the same. But one county trade-mark for butter and for cheese shall be placed on file for the same county. No association shall adopt any trade-mark of any county already on file, or use that of any other county in the formation of a trade-mark.

Object and intent of this article.

SEC. 36. This article and each section thereof are declared to be enacted to prevent deception in the sale of dairy products, and to preserve the public health, which is endangered by the manufacture, sale, and use of the articles or substances herein regulated or prohibited.

Penalties.

SEC. 37 (as amended by section 1 of chapter 554 of laws of 1897). Every person violating any of the provisions of this article shall forfeit to the people of the State of New York the sum of not exceeding one hundred dollars for every such violation. When such violation consists of the manufacture or production of any prohibited article, each day during which or any part of which

such manufacture or production is carried on or continued shall be deemed a separate violation of the provisions of this article. When the violation consists of the sale, or the offering or exposing for sale or exchange, of any prohibited article or substance, the sale of each one of several packages shall constitute a separate violation, and each day on which any such article or substance is offered or exposed for sale or exchange shall constitute a separate violation of this article. When the use of any such article or substance is prohibited, each day during which or any part of which said article or substance is so used or furnished for use shall constitute a separate violation, and the furnishing of the same for use to each person to whom the same may be furnished shall constitute a separate violation. Whoever by himself or another violates any of the provisions of article two of said chapter shall be guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than twenty-five dollars, nor more than two hundred dollars, or by imprisonment of not less than one month nor more than six months, or by both such fine and imprisonment, for the first offense, and by six months' imprisonment for the second offense; and any person who violates any of the provisions of article three of said chapter is guilty of a misdemeanor, and shall be punished by a fine of not less than fifty dollars, nor more than one hundred dollars, and in addition thereto shall forfeit to the people of the State of New York the sum of one hundred dollars for every such violation.

NORTH CAROLINA.

PUBLIC LAWS OF 1895, Chapter 106.

AN ACT defining butter and to regulate the sale thereof. (Ratified February 23, 1895.)

Butter defined. SECTION 1. That for the purpose of this act the word "butter" shall be understood to mean the product manufactured and compounded from fresh and pure milk and cream.

Oleomargarine and butterine defined. SEC. 2. That for the purpose of this act any article manufactured or compounded in imitation or semblance of butter, as defined in section one of this act, which shall be composed of any ingredient or ingredients in combination with butter, shall be known as "oleomargarine" and "butterine," and it shall be unlawful to manufacture, keep for sale, offer for sale, export or import same, except in accordance with the provisions of this act.

Packages to be labeled. SEC. 3. That every manufacturer of said "oleomargarine" and "butterine" shall securely affix by pasting on each package, tub, or firkin thereof so manufactured by him a label on which shall be printed in large Roman type the chemical ingredients and the proportions thereof. Every manufacturer of such compound who neglects to affix such label to any package, tub, or firkin containing such compound manufactured, sold, or offered for sale by him, and every person who removes such label so affixed from any such package, tub, or firkin shall be guilty of a misdemeanor and punished as hereinafter provided.

Act regulates; does not prohibit. SEC. 4. This act shall not be construed as to prohibit the manufacture or sale of said compound, or in any degree violate the provisions of the interstate commerce law relative to this particular subject. The said compound, however, shall not be manufactured, sold, nor offered for sale, except in accordance with the provisions of this act.

Prosecutions; by whom. SEC. 5. It shall be the duty of the district, county, and city attorneys, upon proper information that any of the provisions of this act have been violated, to prosecute such offender before any court of jurisdiction, and upon conviction thereof shall be punished by a fine of not less than fifty dollars, or by imprisonment in the county jail not exceeding thirty days, and for each subsequent offense by a fine of not less than two hundred dollars, or by imprisonment not less than six months, or both, in the discretion of the court.

In effect. SEC. 6. This act shall be in force thirty days after its passage.

PUBLIC LAWS OF 1885, Chapter 122.

AN ACT to prevent the adulteration, misbranding, and sale of foods. (Ratified March 2, 1885.)

Adulterated food prohibited. SECTION 1. That the introduction into the State of any article of food which is adulterated or unbranded, within the meaning of this act, is hereby prohibited; and any person who shall knowingly violate any provision of this act shall be guilty of a misdemeanor, and for such offense shall be fined not exceeding two hundred dollars for the first offense, and for each subsequent offense not exceeding three hundred dollars, or be imprisoned not exceeding one year, or both, in the discretion of the court.

Food and "misbranded" defined. SEC. 2. The term "food," as used herein, shall include all articles used for food or drink by man, whether simple, mixed, or compound. The term "misbranded," as herein used, shall include all articles of food, or articles which enter into the composition of food, the package or label of which shall bear any statement purporting to name ingredients or substances as being contained, or not being contained, in such article, which statement shall be false in any particular.

"Adulterated" defined. SEC. 3. That for the purpose of this act an article shall be deemed to be adulterated in case of food or drink: First, if any substance, or substances, has or have been mixed and packed with it so as to reduce, or lower, or injuriously affect its quality or strength, so that such product, when offered for sale, shall be calculated and shall tend to deceive the purchaser; second, if any inferior substance or substances has or have been substituted, wholly or in part, for the article, so that the product, when sold, shall tend to deceive the purchaser; third, if any valuable constituent of the article has been, wholly or in part, abstracted, so that the product, when sold, shall tend to deceive the purchaser; fourth, if it be an imitation of, or sold under, the specific name, brand, or trademark of another article; fifth, if it be mixed, colored, powdered, or stained in a manner whereby damage is concealed, so that such product, when sold, shall tend to deceive the purchaser; sixth, if it contain any added poisonous ingredient, or any ingredient which may render such article injurious to the health of the person consuming it; seventh, if it consists, of the whole or any part, of a discarded, filthy, decomposed, or putrid animal, or vegetable substance, or any portion of an animal unfit for food, whether manufactured or not, or if it is the product

of a diseased animal which has died otherwise than by slaughter: *Provided*, That an article of food which does not contain any added poisonous ingredient shall not be deemed adulterated or misbranded in the following cases: First, in the case of mixtures or compounds which may be now, or from time to time hereafter, known as articles of food under their own distinctive names, and not included in definition four of this section; second, in the case of articles labeled, branded, or tagged so as to plainly indicate that they are mixtures, compounds, combinations, or blends; third, when any matter or ingredient has been added to the food because the same is required for the production or preparation thereof as an article of commerce in a state fitter for carriage or consumption and not fraudulently increase the bulk, weight, or measure of the food or conceal

the inferior quality thereof: *Provided*, That the same shall be labeled, branded, or tagged so as to show them to be compounds: *And provided further*, That nothing in this act shall be construed as requiring or compelling manufacturers of articles of food to disclose their trade formulas: fourth, when the food is unavoidably mixed with some extraneous matter in the process of collection or preparation.

Not to conflict with commerce. SEC. 4. That this act shall not be construed to interfere with commerce or any interstate commerce laws of the United States.

Original packages to be proceeded against by a process of libel. SEC. 5. That any article of food that is adulterated or misbranded, within the meaning of this act, or is transported or being transported into the State for sale, and is still in the original or unbroken packages, shall be liable to be proceeded against in any court of this State within the district where the same is found and seized for confiscation by a process of libel for condemnation. And if such article is condemned as being adulterated or misbranded, the same shall be disposed of as the said court may direct, and the proceeds thereof, if sold, less the legal costs and charges, shall be paid into the treasury of the State. The proceedings in such libel cases shall conform, as near as may be, to proceedings in admiralty, except that either party may demand trial by jury on any issue of fact joined in such case, and all such proceedings shall be at the suit of and in the name of the State of North Carolina.

In effect. SEC. 6. That this act shall be in force from and after its ratification.

NORTH DAKOTA.

LAWS OF 1895, Chapter 49.

AN ACT entitled "An act to protect dairy interests of the State of North Dakota, and to prevent fraud in dairy products, and to regulate traffic in adulterated butter and cheese." (Approved March 16, 1895.)

Imitation butter to be labeled. SECTION 1. Any person who shall knowingly sell or offer for sale, or procure the sale of, or make or manufacture, any article or substance in semblance of butter, not the legitimate product of the dairy, made exclusively of milk or cream, but into the composition of which the oil or fat of animals, or melted butter, or any oil thereof, enters as a substitute for cream, in tubs, firkins, or other original packages not distinctly, legibly, and durably branded, stamped, or marked in a conspicuous place with the word "Oleomargarine" or "Butterine" or "Patent butter," as the case may be, in letters not less than one-fourth of an inch in width and one-half of an inch in length, or in retail packages not plainly and conspicuously labeled with said words "Oleomargarine" or "Butterine" or "Patent butter," as the case may be, shall be guilty of a **Penalty.** misdemeanor, and punished by a fine of not less than twenty-five dollars nor more than one hundred dollars, or shall be confined in the county jail not less than ten nor more than ninety days, or both such fine and imprisonment, in the discretion of the court.

Patent butter. SEC. 2. Any person or firm who shall sell or offer for sale, or make or manufacture, imitation butter, or butter made of part cream and part caseine or other ingredients, under what is known as "Quinness patent" or process, or any other similar process whereby the caseine of milk and other ingredients are made to imitate and resemble genuine butter made from cream, shall stamp each package of the same on the top and side with lampblack and oil the words "Patent butter" in letters at least one-fourth of an inch wide and one-half of an inch long. Whoever violates the provisions of this section is guilty of a **Penalty.** misdemeanor, and shall [be] punished for each offense by a fine of not less than twenty-five dollars nor more than one hundred dollars, or shall be confined in the county jail not less than ten nor more than ninety days, or both such fine and imprisonment, in the discretion of the court.

Imitation cheese to be labeled. SEC. 3. Any person or firm who shall sell or offer for sale, or make or manufacture out of any oleaginous substance or substances or any compound of the same, or any other compound other than that produced from unadulterated milk, any article designed to take the place of cheese or in imitation of cheese, produced from pure milk, or any article termed "filled cheese," shall stamp each package of the same on the top and side with lampblack and oil the words "Filled cheese," or words that shall designate the exact character and quality of the product, in letters at least one-fourth of an inch wide and one-half of an inch long. Whoever violates the provisions of this section is guilty of a misdemeanor, and shall be punished for each offense by a **Penalty.** fine of not less than twenty-five dollars nor more than one hundred dollars, or shall be confined in the county jail not less than ten nor more than ninety days, or both such fine and imprisonment, in the discretion of the court.

Printed statement with sales; penalty. SEC. 4. Whoever sells or offers for sale any imitation or patent butter or cheese, as described in the foregoing sections of this act, shall give to each purchaser of said goods a printed card stating correctly the different ingredients contained in the said compound. Whoever violates the provisions of this section is guilty of a misdemeanor, and shall be punished for each offense by a fine of not less than twenty-five dollars nor more than one hundred dollars, or shall be confined in the county jail not less than ten nor more than ninety days, or both such fine and imprisonment, in the discretion of the court.

Possession evidence of guilt. SEC. 5. The having in possession by any person or firm of any article or substance prohibited by this act shall be construed *prima facie* evidence that the same is kept by such person or firm in violation of the provisions of this act, and the State dairy commissioners shall be authorized to seize upon and take possession of any such article or substance, and upon the order of any court which has jurisdiction under this act he shall sell the same for any purpose other than to be used for food; the proceeds derived from fines and the sale of imitation butter shall be paid, one-half to the informer and one-half into the State treasury, to be placed to the credit of the State dairy commissioner's fund.

Analysis of specimens. SEC. 6. Samples or specimens of any articles in imitation of butter suspected of being of a spurious character shall be analyzed or otherwise satisfactorily tested as to compounds by the chemist of the Agricultural College at Fargo, free of expense, and a certificate of the analysis, sworn to by the analyzer, shall be admissible as evidence in all prosecutions under this act.

Use of unmarked packages evidence of guilt. SEC. 7. The sale or offer for sale of the substance mentioned in the foregoing section, in packages not branded, stamped, marked, or labeled as therein required, shall be *prima facie* evidence of knowledge of the character of such substance on the part of the person so selling or offering for sale and his employer.

Butter and cheese defined. SEC. 8. For the purpose of this act, the term "butter and cheese" shall be understood to mean the products usually known by those names, and which are manufactured exclusively from milk or cream, or both.

Products of all factories to be branded. SEC. 9. Every cheese factory, creamery, or combined cheese factory and creamery, engaged in the manufacturing of butter and cheese, shall procure a stencil or brand bearing a suitable device and words which shall clearly designate the quality of the product manufactured, and the number and location of the factory, and may contain a special or private brand or name of said factory; every brand shall be used upon the outside of the cheese and also upon the package containing the same, but in the case of butter, on the package only, and shall report annually to the State commissioner of agriculture and labor, who by virtue of his office is *ex officio* State dairy commissioner, the name, location, and number of each factory using the said brand, and the name or names of the persons at each manufactory authorized to use the same, together with a copy of each stencil or brand, and the State dairy commissioner shall keep a book in which shall be registered the same. Whoever violates the provisions of this section shall be guilty of a misdemeanor, and shall be punished by a fine of not less than ten dollars or more than fifty dollars for each and every offense.

Through shipments. SEC. 10. Nothing in this act shall be so construed as to prohibit the shipment of butter and cheese without unloading through the State of North Dakota.

Repealing clause. SEC. 11. All acts or parts of acts in conflict with this act are hereby repealed.

In effect. SEC. 12. Whereas an emergency exists in that it is necessary to sell butter and cheese before the first day of July, therefore this act shall take effect and be in force on its passage and approval.

OHIO.¹

OHIO LAWS, Volume 83, page 120 (Glaucque, 8847-8850).

AN ACT to create the office of dairy and food commissioner, provide for his election, term of office, duties, salaries, expenses, office, disposition of fines collected, annual reports, etc. (Passed and took effect May 8, 1896.)

Ohio dairy and food commissioner; election. SECTION 1 (as amended April 19, 1894; 91 O. L., 156). That there is hereby created the office of dairy and food commissioner of the State of Ohio. Said commissioner shall be elected at the general election held on the first Tuesday after the first Monday in November, A. D. one thousand eight hundred and ninety-six. He shall take his office on the first Tuesday following the fifteenth day of February next after his election, and shall serve for two years, and until his successor is elected and qualified. He shall be charged with the enforcement of all laws against fraud and adulteration or impurities in foods, drinks, or drugs, and unlawful labeling in the State of Ohio. His salary shall be two thousand dollars per year and his necessary and reasonable expense incurred in the discharge in his official duties, to be paid in monthly instalments at the end of each calendar month.

¹ Published in "The Pure Food Laws of Ohio" by the dairy and food commissioner, 1897.

General duties of himself and assistants. SEC. 2 (as amended March 21, 1887; 84 O. L., 205). It shall be the duty of said commissioner or assistant commissioner to inspect any articles of butter, cheese, lard, syrup, or other article of food or drinks made or offered for sale in the State of Ohio as an article of food or drink, and to prosecute or cause to be prosecuted any person or persons, firm or firms, corporation or corporations engaged in the manufacture or sale of any adulterated article of food or drink, or adulterated in violation of or contrary to any laws of the State of Ohio.

Powers. SEC. 3 (as amended March 21, 1887; 84 O. L., 205). The said commissioner, or any assistant commissioner, shall have power in the performance of their duty to enter into any creamery, factory, store, salesroom, drug store or laboratory, or place where they have reason to believe food or drink are made, prepared, sold, or offered for sale, and to examine their books, and to open any cask, tub, jar, bottle, or package containing or supposed to contain any article of food or drink, and examine or cause to be examined and analyzed the contents thereof, and it shall be the duty of any prosecuting attorney in any county of the State, when called upon by said commissioner or assistant commissioner, to render him any legal assistance in his power to execute the laws and to assist in the prosecution of cases arising under provisions of this act.

Assistant commissioners. SEC. 4 (as amended April 16, 1892; 92 O. L., 160). Said commissioner may appoint not to exceed two assistant commissioners, whose salaries shall be one thousand dollars per year and necessary traveling expenses incurred in the discharge of their official duties, to be paid in like manner with the commissioner's and on itemized vouchers approved by said commissioner. The said commissioners shall have power to employ such experts, chemists, agents, inspectors, and counsel as may be deemed necessary for the proper enforcement of the laws, their compensation to be fixed by the commissioner. All charges, accounts, and expenses authorized by this act shall be paid out of the State treasury upon vouchers certified by the commissioner and upon warrant by the State auditor. The entire expense of said commissioner shall not exceed in one year the amount specifically appropriated for such purposes. All vacancies in the office of the food and dairy commissioner shall be filled by appointment of the governor until the next general election, then the same shall be filled as in the original election. All fines assessed and collected under prosecutions begun, or caused to be begun, by the commissioner, shall be paid by the court to the commissioner, and by him paid into the State treasury, and be credited to the general revenue fund of the State.

Experts, chemists, agents, inspectors, and counsel.

Payment of expenses, etc., limitation. The center room on the north side of the southwest corridor in the capitol building, now occupied by the dairy and food commissioner, is set apart for his use, wherein shall be kept his books, records, and other property of the office. He shall keep a seal with which to attest official acts and documents, and shall be entitled to stationery and supplies from the secretary of state as are other State officers.

Vacancies in office of commissioner. The commissioner shall make an annual report to the governor, containing itemized statements of all receipts and disbursements, attorney fees in each specified suit brought in this department, and all persons employed by him, together with such statistics and other matter as he may regard of value; said reports to be published as are the other reports of the other State officers.¹

Office seal, stationery, and supplies.

Annual report.

OHIO LAWS, Volume 88, page 74.

AN ACT to require the Ohio dairy and food commissioner to give bond. (Passed and took effect March 4, 1891.)

Bond. SECTION 1. That the Ohio dairy and food commissioner, before entering upon the discharge of his official duties, shall give bond in the sum of five thousand dollars to the State, with two or more sureties to the acceptance of the governor, conditioned that he will truly account for and apply all moneys or other property which may come into his hands in his official capacity, and for the faithful performance of the duties of his office as the same are prescribed by law; which bond, with his oath of office indorsed thereon, shall be filed with the secretary of state.

¹ Appropriation for 1898 was \$42,000.

OHIO LAWS, Volume 86, page 229 (Glanque, 8837-8840).

AN ACT to regulate the sale of milk. (Passed and took effect April 10, 1890.)

Regulating the sale of milk. SECTION 1. That whoever, by himself or by his servant or agent, or as the servant or agent of any other person, sells, exchanges, or delivers, or has in his custody or possession with intent to sell adulterated and diseased milk. or exchange, or exposes or offers for sale or exchange, substance has been added, or milk from diseased or sick cows, shall, for a first offense, be punished by a fine of not less than fifty nor more than two hundred dollars; for a second offense by a fine of not less than one hundred dollars nor more than three hundred dollars, or by imprisonment in the workhouse for not less than thirty nor more than sixty days; and for a subsequent offense, by a fine of fifty dollars, and by imprisonment in the workhouse of not less than sixty nor more than ninety days.

Selling skimmed milk as pure; penalty. SEC. 2. Whoever, by himself or by his servant or agent, or as the servant or agent of any other person, sells, exchanges, or delivers, or has in his custody or possession, with intent to sell or exchange, or exposes or offers for sale as pure milk, any milk from which the cream or part thereof has been removed, shall be punished by the penalties provided in the preceding section.

Skimmed milk to be labeled. SEC. 3. No dealer in milk, and no servant or agent of such a dealer, shall sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, milk from which the cream or part thereof has been removed, unless in a conspicuous place above the center, upon the outside of every vessel, can, or package, from which or in which such milk is sold, the words "skimmed milk" are distinctly marked in uncondensed Gothic letters not less than one inch in length. Whoever violates the provisions of this section shall be punished by the penalties provided in section 1.

Milk standard. SEC. 4 (as amended April 14, 1896; 92 O. L., 149). In all prosecutions under this chapter, if the milk is shown upon analysis to contain more than eighty-eight per cent of watery fluid, or to contain less than twelve per cent solids, not less than one-fourth of which must be fat, it shall be deemed for the purpose of this chapter to be adulterated, and not of good standard quality, except during the months of May and June, when milk containing less than eleven and one-half per cent of milk solids shall be deemed to be not of good quality.

OHIO LAWS, Volume 86, page 178 (Glanque, 8821-8834, 8836).

AN ACT to prevent adulteration of and deception in the sale of dairy products, and supplementary to Chapter II, Title I, Part 4, of the Revised Statutes. (Passed and took effect May 17, 1896.)

Imitation dairy products to be labeled. SECTION 1 (as amended March 21, 1887; 84 O. L., 182). That no person shall sell, expose or offer for sale or exchange, any substance purporting, appearing, or represented to be butter or cheese, or having the semblance of either butter or cheese, which substance is not made wholly from pure milk, or cream, salt and harmless coloring matter, unless it is done under its true name, and each vessel, package, roll, or parcel of such substance has distinctly and durably painted, stamped, stenciled, or marked thereon the true name of such substance in ordinary bold-faced capital letters, not less than five-line pica in size, and also the name of each article or ingredient used or entering into the composition of such substance, in ordinary bold-faced letters, not [less] than pica in size, or sell or dispose of in any manner to another any such substance without delivering with each amount sold or disposed of a label on which is plainly or legibly printed in ordinary bold-faced capital letters, not less than five-line pica in size, the true name of such substance, and also the name of such articles used and entering into the composition of such substance in ordinary bold-faced letters, not less than pica in size, if the same be not made wholly from pure milk or cream, salt and harmless coloring matter; and the words "butter," "creamery," or "dairy," or any word or combination of words embracing the same, shall not be placed on any vessel, package, roll, or parcel containing any imitation dairy product or substance not wholly made from pure milk, or cream, salt, and harmless coloring matter.

Articles shall not be made for sale as genuine butter or cheese. SEC. 2. No person or persons shall manufacture out of any oleaginous substance or substances, or any compound of the same other than that produced from unadulterated milk or cream, salt and harmless coloring

matter, any article designed to be sold as butter or cheese made from pure milk or cream, salt, and harmless coloring matter. Nothing in this section shall prevent the use of pure skimmed milk in the manufacture of cheese.

Same. SEC. 3. No person or persons shall manufacture, mix, compound, or add to natural or pure milk, cream, butter, or cheese, any animal fats, animal, mineral, or vegetable oils, nor shall any person or persons manufacture any oleaginous or other substance not produced from pure milk or cream, salt, and harmless coloring matter, or have the same in his possession, or offer or expose the same for sale or exchange with intent to sell or in any manner dispose of the same as and for butter and cheese made from unadulterated milk or cream, salt, and harmless coloring matter, nor shall any substance or compound so made be sold or disposed of to any one as and for butter or cheese made from pure milk or cream, salt, and harmless coloring matter.

False brands and labels on imitations. SEC. 4. No person or persons shall sell, exchange, expose, or offer for sale or exchange, dispose of or have in his possession, any substance or article made in imitation or resemblance of, or as a substitute for, any dairy product which is falsely branded, stenciled, labeled, or marked as to the place where made, the name or cream value thereof, its composition or ingredients, or in any other respect.

False brands and labels on dairy products. SEC. 5. No person or persons shall sell, exchange, expose, or offer for sale or exchange, dispose of or have in his possession, any dairy products which are falsely branded, stenciled, labeled, or marked as to the place where made, date of manufacture, the name or cream value thereof, composition, or ingredients, or in any other respect, and cheese wholly made from skimmed milk shall have branded upon the box or can "made from skimmed milk."

Card to be displayed by dealers in artificial dairy products.

SEC. 6 (as amended March 8, 1888; 85 O. L. 74). Every person in this State who shall deal in, keep for sale, expose or offer for sale or exchange, any substance other than butter or cheese made wholly from pure milk or cream, salt, and harmless coloring matter, which appears to be, resembles, or is made in imitation of, or as a substitute for butter or cheese, shall keep a card not less in size than ten by fourteen inches, in a conspicuous and visible place where the same may be easily seen and read in the store, room, stand, booth, wagon or place where such substance is, on which card shall be printed, on a white ground, in bold, black Roman letters, not less in size than twelve-line pica, the words, "Oleomargarine" or "Imitation cheese" (as the case may be), "sold here," and said card shall not contain any other words than the ones above described; and no person shall sell any oleomargarine, suine, imitation cheese, or other imitation dairy product, at retail or in any quantity less than the original package, tub, or firkin, unless he shall first inform the purchaser that the substance is not butter or cheese, but an imitation of the same.

Card to be displayed by keepers of hotels, restaurants, etc.

SEC. 7 (as amended March 8, 1888; 85 O. L. 74). Every proprietor, keeper, or manager or person in charge of any hotel, boarding house, restaurant, eating house, lunch counter, or lunch room, who therein sells, uses, or disposes of any substance which appears to be, resembles, or is made in, or as an imitation of, or is made as a substitute for butter or cheese, under whatsoever name, and which substance is not wholly made from pure milk or cream, salt, and harmless coloring matter, shall display and keep a card in a conspicuous place, where the same may be easily seen and read in the dining, eating, restaurant, and lunch room and place where such substance is sold, used, or disposed of, which card shall be white and in size not less than ten by fourteen inches, upon which shall be printed in plain, bold, black Roman letters, not less in size than twelve-line pica, the words "Oleomargarine sold and used here," or "Imitation cheese sold and used here" (as the case may be), and said card shall not contain any other words than the ones above described, and such proprietor, keeper, manager, or person in charge shall not sell, furnish, or dispose of such substance as and for "butter and cheese," made from pure milk or cream, salt, and harmless coloring matter, when butter or cheese is asked for.

Fraudulent packing and shipping. SEC. 8. No person or persons shall pack, box, inclose, ship, or consign any substance, as butter or cheese made from pure milk or cream, salt and harmless coloring matter in such a manner as to conceal an inferior article by placing a finer grade of butter or cheese upon the surface of the same.

Sale of diluted milk. SEC. 9. No person or persons shall sell to any person, or deliver or carry or cause to be carried to any cheese or butter factory to be manufactured, any milk diluted with water or in any way adulterated, or from which any cream has been taken, or milk commonly known as "skimmed milk," or milk from which [the] part known as "strippings" has been withheld with the intent to defraud, or keeps or renders any false account of the quantity or weight of milk furnished at or to any factory for manufacture or sold to any manufacturer.

Impure and skimmed milk. SEC. 10. No person or persons shall sell, exchange, or offer for sale or exchange, any unclean, impure, unhealthy, unwholesome milk, or sell, exchange, or offer for sale or exchange as "pure milk," milk diluted with water or milk known as skimmed milk.

Milk falsely labeled, etc. SEC. 11. No person or persons shall sell, exchange, expose, or offer for sale or exchange, have in his possession, or dispose of in any manner, any milk which is falsely branded, labeled, marked, or represented as to grade, quantity, or place where produced or procured.

Cows unhealthy, etc. SEC. 12. No person shall keep cows for the production of milk for any purpose in a cramped or unhealthy condition, or feed them on unhealthy food or upon food that produces impure, unhealthy, or unwholesome milk.

Condensed milk. SEC. 13. No person shall manufacture, sell, exchange, expose, or offer for sale or exchange, any condensed milk, unless the package, can, or vessel containing the same shall be distinctly labeled, stamped, or marked with its true name, brand, by whom and under what name made, and no condensed milk shall be made, exchanged, exposed, or offered for sale or exchange, unless the same be made from pure, clean, healthy, fresh, unadulterated, and wholesome milk, from which the cream has not been removed, or unless the proportion of milk solids contained in the condensed milk shall be in amount the equivalent of twelve per centum of milk solids in crude milk, and of such solids twenty-five per centum shall be fat.

Imitations in State institutions prohibited. SEC. 14. No butter or cheese not made wholly from pure milk or cream, salt, and harmless coloring matter, shall be used in any of the charitable or penal institutions of the State.

Penalties. SEC. 15. Any person or persons violating any of the provisions or sections of this act shall, upon conviction thereof, be fined not less than fifty or more than two hundred dollars for the first offense, or for each subsequent offense not less than one hundred or more than five hundred dollars, and be imprisoned not less than ten days or more than ninety days, or both.

Repealed as to informers. SEC. 16. Repealed April 27, 1896, 92 O. L. 319.

Repealing clause. SEC. 17. That section 7089 of the Revised Statutes, and acts of April 13, 1881, vol. 78, page 130, and April 26, 1881, vol. 78, page 198, amendatory and supplementary of section 7090, and the act to prevent the manufacture and sale as butter of oleomargarine and other similar substances, passed April 27, 1885, vol. 82, page 169, are hereby repealed.

OHIO LAWS, Volume 87, page 51.

AN ACT to prevent deception in the sale of dairy products and to preserve the public health.
(Passed March 7, 1890; took effect May 1, 1890.)

Imitations of butter and cheese prohibited. SECTION 1. That no person, by himself or his agent, or his employee, shall render or manufacture for sale out of animal or vegetable oils, not produced from unadulterated milk or cream from the same, any article in imitation or semblance of natural butter or cheese produced from pure unadulterated milk or cream from the same, nor compound with, or add to milk, cream, or butter any acids or deleterious substance, or animal fats or animal or vegetable oils not produced from milk or cream, so as to produce any article or substance, or any human food, in imitation of natural butter or cheese, nor shall sell, keep for sale, or offer for sale any article, substance or compound made, manufactured, or produced in violation of the provisions of this section, whether such article, substance, or compound shall be made or produced in this State or elsewhere.

Natural butter and cheese, etc., defined. SEC. 2. For the purpose of this act the terms "natural butter and cheese," "natural butter or cheese produced from pure unadulterated milk or cream from the same, butter and cheese made from unadulterated milk or cream, butter or cheese, the product of the dairy," and butter or cheese shall be understood to mean the products usually known by the terms butter and cheese, and which butter is manufactured exclusively from pure milk or cream, or both, with salt, and with or without any harmless coloring matter, and which cheese is manufactured exclusively from pure milk or cream, or both, with salt and rennet and with or without any harmless coloring matter or sage. It is further provided that nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine, in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from any coloring matter or other ingredient causing it to look like or to appear to be butter, as above defined.

Penalty. SEC. 3. Whoever violates the provisions of this act shall be guilty of a misdemeanor, and be punished by a fine of not less than one hundred dollars, nor more than five hundred, or not less than six months nor more than one year's imprisonment for the first offense, and by imprisonment for one year for each subsequent offense.

OHIO LAWS, Volume 91, page 274.

AN ACT to prevent fraud and deception in the manufacture and sale of oleomargarine, and promote public health in the State of Ohio. (Passed and took effect May 16, 1894.)

Oleomargarine, restrictions as to coloring. SECTION 1. That no person shall manufacture, offer or expose for sale, sell or deliver, or have in his possession with intent to sell or deliver, any oleomargarine which contains any methyl [methyl] orange, butter yellow, annatto, analine dye, or any other coloring matter.

Placards to be displayed by dealers. SEC. 2. Every person who shall offer or expose for sale, sell or deliver, or have in his possession with intent to sell or deliver, any oleomargarine, shall keep a white placard not less in size than ten by fourteen inches, in a conspicuous place where the same may be easily seen and read, in the store, room, stand, booth, vehicle, or place where such substance is offered or exposed for sale, on which placard shall be printed in black letters, not less in size than one and one-half inches square, the words "Oleomargarine sold here;" and said placard shall not contain any other words than the ones described; and no person shall sell or deliver any oleomargarine unless it be done under its true name, and each package has on the upper side thereof a label on which is printed, in letters not less than five-eighths to an inch square, the word "Oleomargarine," and in letters of not less than one-eighth of an inch square, the name and per cent of each ingredient therein.

Placards to be displayed by hotel proprietors and others. SEC. 3 (as amended February 13, 1896; 92, O. L. 23). Every proprietor, keeper, manager or person in charge of any hotel, boat, railroad car, boarding house, restaurant, eating house, lunch counter, or lunch room, who therein sells, uses, serves, furnishes, or disposes of or uses in cooking, any oleomargarine, shall display and keep a white placard in a conspicuous place, where the same may be easily seen and read, in the dining room, eating room, restaurant, lunch room, or place where such substance is furnished, served, sold, or disposed of, which placard shall be in size not less than ten by fourteen inches, upon which shall be printed in black letters, not less in size than one and a half inches square, the words "Oleomargarine sold and used here," and said card shall not contain any other words than the ones above described, and such proprietor, keeper, manager or person in charge shall not sell, serve, or dispose of such substance as for butter when butter is asked for or purported to be furnished or served.

Oleomargarine defined. SEC. 4. The word "Oleomargarine," as used in this act, shall be construed to mean any substance not pure butter of not less than eighty per cent of butter fats, which substance is made as substitute for, in imitation of, or to be used as butter.

Penalty for violation of act. SEC. 5. Any manufacturer who violates any of the provisions of this act shall, upon conviction thereof, be fined in any sum not less than one hundred dollars, nor more than five hundred dollars; and for each subsequent offense, in addition to the above fine, may be imprisoned

in the county jail not more than ninety days. Any other person violating any of the provisions of this act shall, upon conviction thereof, be fined not less than fifty dollars nor more than one hundred dollars.

Repealing clause. SEC. 6. All acts and parts of acts not in accordance with the provisions of this act be and are hereby repealed.

In effect. SEC. 7. This act shall take effect and be in force from and after its passage.

OHIO LAWS, Volume 32, page 51.

AN ACT to prevent fraud in the manufacture and sale of imitations of cheese or substitutes for cheese, and to regulate the branding of cheese in the State of Ohio. (Passed and took effect March 3, 1896.)

Branding of filled cheese and skimmed cheese. SECTION 1 (as amended by act passed April 7, 1898). Whoever, by himself or his agents, sells, exposes for sale, or has in his possession with intent to sell, any

article, substance, or compound made in imitation or semblance of cheese, or as a substitute for cheese, and not made exclusively and wholly of milk or cream with salt, rennet, and with or without harmless coloring matter, or containing any fats, oils, or grease not produced from milk or cream, shall have the words "Filled cheese," and all cheese made exclusively and wholly from milk or cream with salt, rennet, and with or without harmless coloring matter, and containing less than twenty per cent of pure butter fat, shall have the words "Skimmed cheese" stamped, labeled, or marked, in printed letters of plain, uncondensed Gothic type, not less than one inch in length, so that the words can not easily be defaced, and upon the side of every cheese, cheese-cloth or band around the same, and upon the top and side of every tub, firkin, box, or package containing any of said articles, substance, or compound. And in case of retail sales of any

Retail sales. of said articles, substance, or compound, not in the original package, the seller shall, by himself or his agents, attach to each package so sold, and shall deliver therewith to the purchaser, a label or wrapper bearing in a conspicuous place upon the outside of the package the words "Filled cheese," or "Skimmed cheese," as the case may be, in printed letters of plain, uncondensed Gothic type, not less than one inch in length.

Violation of section 1. SEC. 2. Whoever, by himself or his agents, sells, exposes for sale, or has in his possession with intent to sell, any article, substance, or compound made in imitation or semblance of cheese, or as a substitute for cheese, except as provided in section 1 of this act, and whoever, with intent to deceive, defaces, erases, cancels, or removes any

Tampering with marks. mark, stamp, brand, label, or wrapper provided for in said section, or in any manner shall falsely label, stamp, or mark any box, tub, article, or package marked, stamped, or labeled as aforesaid, shall be punished by a fine

Penalty. of not less than fifty nor more than one hundred dollars, or by imprisonment in the county jail not less than ten nor more than thirty days for the first offense, and by a fine not less than one hundred nor more than two hundred dollars, or by imprisonment in the county jail not less than twenty nor more than sixty days, or both, for each subsequent offense.

Selling or offering imitation when cheese is called for; penalty. SEC. 3 (as amended by act passed April 7, 1898). Whoever by himself, or his agents, sells or offers for sale to any person who

asks, sends, or inquires for cheese, any article, substance, or compound made in imitation or semblance of cheese, or as a substitute for cheese, not made entirely from milk or cream, with salt, rennet, and with or without harmless coloring matter, and containing not less than twenty per cent pure butter fats, shall be punished by a fine of not less than fifty nor more than one hundred dollars, or by imprisonment in the county jail not less than ten nor more than thirty days for the first offense, and by a fine of not less than one hundred nor more than two hundred dollars, or by imprisonment in the county jail not less than twenty nor more than sixty days, or both, for each subsequent offense.

Selling imitation or skimmed cheese without proper brands and placard. SEC. 4. Whoever, by himself or his agents, sells or offers for sale any article, substance, or compound made in imitation or semblance

of cheese, or as a substitute for cheese, not made entirely from milk or cream, with salt, rennet, and with or without harmless coloring matter, not marked and distinguished by all the marks, words, and stamps required by this act, and not having in addition thereto upon the exposed contents of every opened tub, box, or parcel thereof a conspicuous placard with the words "Filled cheese," or "Skimmed cheese," as the case may be, printed thereon in plain, uncondensed letters not less

Penalty. than one inch long, shall be punished by a fine not less than fifty nor more than one hundred dollars, or by imprisonment in the county jail not less than ten nor more than thirty days for the first offense, and by a fine of not less than one hundred nor more than two hundred dollars, or by imprisonment in the county jail not less than twenty nor more than sixty days, or both, for each subsequent offense.

Posting of placard at place of business. SEC. 5. Whoever, by himself or his agents, sells "filled cheese" or "skimmed cheese," or any substance made in imitation or semblance of cheese, or as a substitute for cheese, not made entirely from milk and cream, with salt, rennet, and with or without harmless coloring matter, from any dwelling, store, office, or public mart, shall have conspicuously posted thereon the placard or sign, in letters not less than four inches in length, "Filled cheese sold here," or "Skimmed cheese sold here," as the case may be. Any person neglecting or failing to post the placard herein provided for shall be punished by a fine of one hundred dollars for the first offense, and by a fine of one hundred dollars for each day's neglect thereafter.

Sides of vehicle to be placarded. SEC. 6. Whoever, by himself or his agents, peddles, sells, solicits orders for the future delivery of, or delivers from any cart, wagon, or other vehicle upon the public streets or ways, "filled cheese" or "skimmed cheese," or any substance made in imitation or semblance of cheese, or as a substitute for cheese, not made entirely from milk or cream, with salt, rennet, and with or without harmless coloring matter, not having on both sides of said cart, wagon, or other vehicle the placard in uncondensed Gothic letters not less than three inches in length, "Filled cheese" or "Skimmed cheese," shall be punished by a fine of not less than fifty nor more than one hundred dollars, or by imprisonment in the county jail not less than ten nor more than thirty days for the first offense, and by a fine of not less than one hundred nor more than two hundred dollars, or by imprisonment in the county jail not less than twenty nor more than sixty days, or both, for each subsequent offense.

Guests at hotels, etc., to be notified. SEC. 7. Whoever, by himself or his agents, furnishes, or causes to be furnished, in any hotel, restaurant, or at any lunch counter "filled cheese," or "skimmed cheese," or any substance made in imitation or semblance of cheese, or as a substitute for cheese, not made entirely from milk or cream, with salt, rennet, and with or without harmless coloring matter, to any guest or patron of said hotel, restaurant, or lunch counter, in the place or stead of cheese, shall notify said guest or patron that the substance so furnished is not cheese, and any person so furnishing without said notice, shall be punished by a fine of not less than ten or more than fifty dollars for each offense.

Branding of full milk cheese. SEC. 8. Every manufacturer of full milk cheese may put a brand upon each cheese so manufactured indicating "full milk cheese," with the date and year when made, and no person shall use such a brand upon any cheese made from milk from which any of the cream has been taken. The food and dairy commissioner shall procure and issue to the cheese manufacturers of the State, upon proper application, which application shall be made on or before the first day of April, 1896, and on or before the first day of April of each year thereafter, and under such regulations as to the custody and use thereof, as he may describe, a uniform stencil brand bearing a suitable device

or motto, and the words "Ohio State full cream cheese." Every such brand shall be used upon the outside of the cheese, cheese cloth or band around the same, and upon the box or package containing the same, and shall bear a separate number for each separate factory. The said commissioner shall keep a book in which shall

be registered the name, location, and number of each manufacturer using the brand, and the name or names of the person or persons in each factory authorized to use the same. No such brand shall be used upon any other but full cream cheese or packages containing the same: *Provided,*

Pure skimmed cheese permitted. That nothing in this section shall be construed to prohibit the manufacture and sale of pure skimmed cheese made from milk that is clean, pure, healthy, wholesome, and unadulterated except

by skimming. The commissioner shall receive a fee of one dollar for each registration according to the provisions of this section, such fee to be paid by the person applying for such registration. Whoever, by himself or his agents, violates any of the provisions of this section, shall

Penalty. be punished by a fine of not less than fifty nor more than one hundred dollars, or by imprisonment in the county jail not less than ten nor more than thirty days for the first offense, and by a fine of not less than one hundred nor more than two hundred dollars, or by imprisonment in the county jail not less than twenty nor more than sixty days, or both, for each subsequent offense.

Person defined. SEC. 9. The word "person," as used in this act, shall include persons, corporations, and companies.

Repealing clause. SEC. 10. An act entitled "An act to regulate the branding of cheese in the State of Ohio, and to prevent fraud in its manufacture and sale," as passed May 19, 1894, is hereby repealed, and this act shall take effect and be in force from and after its passage.

OHIO LAWS, Volume 81, page 67.

AN ACT to provide against the adulteration of food and drugs. (Passed March 20, 1884; took effect forty days later.)

Adulterated articles not to be manufactured or sold. SECTION 1. That no person shall, within this State, manufacture for sale, offer for sale, or sell any drug or article of food which is adulterated within the meaning of this act.

Term food defined. SEC. 2. * * * The term "food" as used herein shall include all articles used for food or drink by man, whether simple, mixed, or compound.

SEC. 3 (as amended April 22, 1890; 87 O. L., 248). An article shall be deemed to be adulterated within the meaning of this act:

* * * * *

Food deemed adulterated, when. (b) In the case of food: (1) If any substance or substances have been mixed with it, so as to lower or depreciate, or injuriously affect its quality, strength, or purity; (2) if any inferior or cheaper substance or substances have been substituted wholly or in part for it; (3) if any valuable or necessary constituent or ingredient has been wholly or in part abstracted from it; (4) if it is an imitation of, or is sold under the name of, another article; (5) if it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted, or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the produce of a diseased animal; (6) if it is colored, coated, polished, or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; (7) if it contains any added substance or ingredient which is poisonous or injurious to health: *Provided*, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food, if each and every package sold or offered for sale be distinctly labeled as mixtures or compounds, with the name and per cent of each ingredient therein, and are not injurious to health.

Sample for analysis. SEC. 4. Every person manufacturing, offering or exposing for sale, or delivering to a purchaser any drug or article of food included in the provisions of this act shall furnish to any person interested or demanding the same, who shall apply to him for the purpose and shall tender him the value of the same, a sample sufficient for the analysis of any such drug or article of food which is in his possession.

Penalty. SEC. 5. Whoever refuses to comply, upon demand, with the requirements of section 4, and whoever violates any of the provisions of this act, shall be guilty of a misdemeanor, and upon conviction shall be fined not exceeding one hundred nor less than twenty-five dollars, or imprisoned not exceeding one hundred nor less than thirty days, or both. And any person found guilty of manufacturing, offering for sale, or selling an adulterated article of food or drug under the provisions of this act shall be adjudged to pay, in addition to the penalties hereinbefore provided for, all necessary costs and expenses incurred in inspecting and analyzing such adulterated articles of which said person may have been found guilty of manufacturing, selling, or offering for sale.

OKLAHOMA.

COMPILED STATUTES, 1893, Chapter 23, Article 36 (2234).

Adulteration a misdemeanor. SECTION 16. Every person who adulterates or dilutes any article of food, drink, drug, medicine, strong, spirituous, or malt liquor or wine, or any article useful in compounding either of them, whether one useful for mankind or for animals, with a fraudulent intent to offer the same, or cause or permit it to be offered for sale, as unadulterated or undiluted, and every person who fraudulently sells or keeps or offers for sale the same as unadulterated or undiluted, knowing it to have been adulterated or diluted, is guilty of a misdemeanor.

Article 50 (2436, 2437, 2443).

Information to buyers. SECTION 1. Any person who shall sell any kind of diseased, corrupted, or unwholesome provisions, whether meat or drink, without first making the fact fully known to the buyers, shall be punished by imprisonment in the county jail not more than six months, or by fine not exceeding one hundred dollars.

Penalty for fraud, etc. SEC. 2. Any person who shall fraudulently adulterate, for the purpose of sale, or shall offer for sale, any substance intended for food, or any wine, spirits, malt, or other spirituous liquors, or any other fluid intended for drinking, or any candy or sweetmeat, with any substance, coloring matter, or anything poisonous, deleterious, or injurious to health, or any article of food or drink that is not just what in its purity represented to be, or who shall manufacture, sell, or offer for sale any such adulterated food, liquor, candy, or sweetmeat, shall be punished by imprisonment in the county jail not more than one year, or by fine not exceeding two hundred dollars, and articles so adulterated shall be forfeited and destroyed.

Sale or delivery of impure milk prohibited. SEC. 8. Any person who shall bring or send to any other person or company or corporation, to be used for the manufacture of butter or cheese, or who shall sell, furnish, or supply to any other person, to be used in any manner whatever, any milk drawn from a cow not in proper condition of health, or any milk adulterated by any deleterious substances, or that has been adulterated with water or colored by any substance whatsoever, shall be punished by imprisonment in the county jail not more than thirty days or by fine not exceeding fifty dollars, and shall be civilly liable to the party wronged in a sum of not less than fifty dollars.

Chapter 8 (342).

AN ACT creating a board of health and regulating the practice of medicine. (Took effect December 25, 1890.)

SECTION 4. Said Territorial board of health shall have power and it shall be their duty:

* * * * *

Seventh. To condemn and cause to be destroyed any impure or diseased article of food that may be offered for sale.

OREGON.

GENERAL LAWS, 1893, page 90.

AN ACT to prevent the production and sales of unwholesome foods and medicines, and to regulate sales of adulterated foods, drinks, medicines, and fertilizers, and to repeal the act entitled "An act to prevent the production and sales of unwholesome foods, and to regulate the sales of adulterated foods, drinks, and medicines," approved February 25, 1890. (Filed in the office of secretary of state February 21, 1893.)

Impure foods. SECTION 1. It shall be unlawful for any person or persons to sell or exchange, or expose for sale or exchange, any unwholesome, unclean, tainted, or diseased foods of any kind whatever.

Same. SEC. 2. It shall be unlawful for any person or persons to sell or exchange, or expose for sale or exchange, any unwholesome, unclean, tainted, or diseased foods or medicines of any kind whatever.

Adulterated foods to be marked. SEC. 3. No person or persons shall sell or exchange, or expose for sale or exchange, or have in his or

their possession for sale or exchange, any adulterated food, drink, medicine, or fertilizers unless the same shall be plainly marked so as to establish its true character and distinguish it from pure articles of foods, drinks, medicines, or fertilizers; and in any public dining or eating room where adulterated foods or drinks are used the bill of fare shall state the fact in the same-sized type as is used in printing the body of said bill of fare; or, if no bill of fare is used, then and in that case printed notice thereof shall be posted in a conspicuous place in said dining or eating room, so as to be easily seen by anyone entering such room, in which notice shall be stated in large letters the fact that adulterated foods and drinks are being used for foods, or for foods and drinks.

Stabling and care of cows. SEC. 4. When cows are kept by any person for dairy purposes, either for butter or cheese, or for the production of milk or cream, for sale, and are confined in stables, such cows so confined shall each be allowed at least eight hundred cubic feet of air, and such cows so stabled shall not be confined facing each other when closer together than six feet unless there shall be an air-tight partition between such cows at least four feet in height; and all stables where such cows are kept shall be well ventilated and kept in a good healthful condition; and if any suspected diseased cow or other animal belonging to or kept in or about any dairy, the State dairy and food commissioners shall notify the State veterinarian; and if any dairy where cows are kept for the purpose above stated is found to be in a filthy and unhealthful condition, the commissioners may notify the proprietor that said dairy must be put in a healthful condition within three days; and should said proprietor neglect or refuse to comply with such order, then the commissioner may employ other persons to perform such duty, and said proprietor shall pay all expenses of such labor.

Penalty. SEC. 5. Whosoever violates any of the provisions of this act shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment in the county jail not less than thirty days nor more than six months. Justice's courts shall have jurisdiction of all cases arising under this act.

Possession of adulterated products. SEC. 6. If any person or persons shall have purchased foods, drinks, medicines, or fertilizers, believing them to be pure and unadulterated, which shall prove by analysis or tests to be adulterated, such person or persons shall not be deemed guilty under this act: *Provided*, That such person or persons pay to the State dairy and food commissioner the sum of ten dollars in case of analysis or five dollars for each test made by him to determine the quality of such foods, drinks, medicines, or fertilizers, as the case may be, and who shall, after being informed of such adulteration, at once mark the same as required by section 3 of this act, all moneys collected by the commissioner for making analysis be paid by the commissioner to the State Agricultural College for making tests to be credited to the State and become a part of the State appropriation to defray the expenses of the enforcement of this act.

Adulterated defined. SEC. 7. An article of food or drink or medicine is deemed to be adulterated within the meaning of this act when—

1. Any substance or substances have been mixed with it so as to reduce or lower or injuriously affect its quality or strength.

2. If any inferior or cheaper substance or substances have been substituted wholly or in part for it.

3. If any valuable constituent has been wholly or in part abstracted from it.

4. If it is an imitation of or is sold under the name of another article.

5. If it is colored, coated, polished, or powdered, whereby damage is concealed, or if it is made to appear better or of greater value than it really is: *Provided, however*, That salt and annatto, or butter color in which annatto is the principal ingredient, shall not be considered an adulteration when used in dairy products.

Butter standard. 6. Butter that contains more than 14 per cent water.

Milk standard. 7. Milk that contains more than 88 per cent water.

8. Milk that contains less than 3 per cent butter fat.

9. Milk that contains less than 12 per cent volume of cream or less than 1.035 specific gravity after the cream has been removed.

Dairy and food commissioner. SEC. 8.¹ The legislative assembly of each regular session thereof, when assembled in joint convention, shall elect a commissioner, who shall be known as the Oregon State dairy and food commissioner, who shall hold his office for the term of two years, and until his successor is elected and qualified, who shall qualify within thirty days from the time of his

¹ Amount annually appropriated for dairy commissioner, \$500.

election by taking and filing an oath to faithfully perform the duties of said office with the secretary of state, and shall receive for his salary the sum of ten hundred dollars per year and his actual traveling expenses and expenses incurred in the discharge of the duties of his said office; and said commissioner shall be elected as aforesaid at any time before the final adjournment of the present

Qualifications and duties. The person elected as such commissioner shall be well qualified in dairy matters and qualified to give theoretical and practical instruction in dairying; and it shall be the duty of such commissioner to give practical and theoretical instruction in dairy matters (when and wherever opportunity offers within the State), and to collect and disseminate such information as is calculated to develop the dairy industry within the State. The said commissioner shall establish his office in the city of Portland, in this State, and shall, upon complaint being made by any citizen of the State of Oregon, or without such complaint, if in his opinion necessary, examine into any case of violation or of supposed violation of the provisions of this act or any of

Deputies. The said commissioner may appoint one deputy in each county in this State, said deputy's duties and compensation to be prescribed by the commissioner, said deputy or deputies to be compensated by the commissioner.

Assistance from chemist of State college. SEC. 9. It shall be the duty of the chemist of the State Agricultural College to correctly analyze any and all substances the said commissioner may send him for the purpose of carrying out the provisions of this act.

Powers and authority of officials. SEC. 10. The said commissioner, and such experts and chemists or agents as he shall duly authorize for the purpose, shall have access to, egress and ingress to, all places of business, factories, stores, farm buildings, carriages, cars, vessels, and implements used in the manufacture, production, or sale of any food, drinks, medicines, or fertilizers; and they shall also have the power and authority to open any package, case, or vessel containing such articles which may be manufactured, sold, or exposed for sale; and any manufacturer, dealer, hotel or restaurant keeper shall deliver to the commissioner or his deputy any sample of food, drinks, medicines, or fertilizers for analyzing or testing, upon a tender of the price thereof in money.

Report of commissioner. SEC. 11. Said commissioner shall keep a full and correct account of all business done by him or his experts, chemists, or agents, and report the same to the legislature.

Evidence. SEC. 12. The doing of anything prohibited being done and the not doing of anything directed to be done by this act shall be presumptive evidence such of willful intent to violate the different sections thereof.

Disposition of fines. SEC. 13. In all prosecutions under this act the fine or fines collected by and under the same shall go to the common school fund of this State: *Provided*, That all such moneys shall be transmitted to the State treasurer at the State capitol by the officer collecting the same: *Provided further*, That the State treasurer shall forward a duly certified receipt, and shall credit all such accounts to the common school fund.

Impure milk defined. SEC. 14. In all prosecutions under the provisions of this act relating to the sale of diseased foods or that which is unclean, impure, or unhealthy, milk drawn from cows for fifteen days next before and five days next after parturition, or from cows fed on unwholesome food, or any calf that has been slaughtered under the age of four weeks, shall be deemed and declared unclean, impure, and unwholesome.

Use of boxes belonging to another. SEC. 15. Any person who shall use the box or boxes used by any creamery or dairyman for the purpose of selling the butter of any other creamery or dairyman shall be subject to all the fines and penalties provided for in this act.

Dealers in imitation dairy products to keep a sale book. SEC. 16. Every person who sells oleomargarine, butterine, or any imitation butter whatsoever, or other imitation dairy products in this State, shall keep a sale book, in which all sales shall be entered at the time of sale. Said sale book shall state the amount sold, together with the name and address of the purchaser, and said sale book shall be open to the inspection of the State food commissioner or his agent at all times.

Transportation companies to furnish information. SEC. 17. Every railroad company or other transportation company in this State, upon application of the State food commissioner or his authorized agent, shall give the name and address of any shipper or consignee of any supposed diseased meats or foods of any kind.

Reports from manufacturers of dairy products. SEC. 18. Every person who manufactures butter or cheese in this State from milk drawn from cows not owned by such manufacturer shall report to the food commissioner every three months; and in case such manufacturer owns any cows from which milk is used in conjunction with purchased milk, the report shall state the fact, and shall include such cows the same as if owned by any other person. Said report shall show—

First. Name and address of manufacturer.

Second. Name and address of owner of cows.

Third. Number of pounds of milk purchased.

Fourth. Total number of pounds of milk used in the manufacture of butter and the number of pounds used in making cheese.

Fifth. Number of pounds of butter and cheese made.

Sixth. Number of pounds of butter and cheese sold.

Repealing clause. SEC. 19. The act entitled "An act to prevent the production and sale of unwholesome foods, and to regulate sales of adulterated foods, drinks, and medicines," approved February 25, 1889, is hereby repealed.

In effect. SEC. 20. Inasmuch as an emergency exists, to prevent and correct the evils herein sought to be corrected this act shall be in force from and after its approval by the governor.

PENNSYLVANIA.

SESSION OF 1893, No. 96.

AN ACT to enlarge the powers of the State board of agriculture, to authorize the said board to enforce the provisions of the act entitled "An act for the protection of the public health, and to prevent adulteration of dairy products and fraud in the sale thereof," approved May twenty-one, anno Domini one thousand eight hundred and eighty-five, and of other acts in relation to dairy products; to authorize the appointment of an agent of the said board who shall be known as the "dairy and food commissioner," and to define his duties and fix his compensation, being supplementary to an act entitled "An act to establish a State board of agriculture," approved May eighth, anno Domini one thousand eight hundred and seventy-six. (Approved May 23, 1893.)

State board of agriculture to enforce dairy laws.

SECTION 1. That the State board of agriculture be, and is hereby, empowered and charged with the enforcement of the provisions of the act entitled "An act for the protection of the public health, and to prevent the adulteration of dairy products and fraud in the sale thereof," approved May twenty-one, anno Domini one thousand eight hundred and eighty-five, and with laws now enacted, or hereafter to be enacted, prohibiting or regulating the adulteration or imitation of butter, cheese, or other dairy products.

Dairy and food commissioner. SEC. 2.¹ That for the purpose of securing the enforcement of the provisions of the said laws concerning dairy products the president of the State board of agriculture be, and hereby is, authorized and empowered to appoint an agent of the said board, who shall be known by the name and title of the "dairy and food commissioner," who shall hold his office for the term of two years, or until his successor shall be duly appointed and qualified, and shall receive a salary of two thousand dollars per annum and his necessary expenses incurred in the discharge of his official duties under this act. The said agent shall be charged under the direction of his duties. the said board with the execution and enforcement of all laws now enacted, or hereafter to be enacted, in relation to the adulteration or imitation of dairy products.

Appointment of assistants, experts, counsel, etc. SEC. 3. That the said agent of the said board, the said dairy and food commissioner, is hereby authorized and empowered, subject to the approval of the said State board of agriculture, to appoint and fix the compensation of such assistants, agents, experts, chemists, detectives, and counsel as may be deemed by him necessary for the proper discharge of the duties of his office and for the discovery and prosecution of violations of the said laws: *Provided*, That the entire expenses of the said agent and of all his assistants, agents, experts, chemists, detectives, and counsel (salaries included) shall not exceed the sum appropriated for the purposes of this act.

¹ See Session Laws, 1895, No. 8, section 4, following this act.

Authority of officers. SEC. 4. That the said agent of the State board of agriculture and such assistants, agents, experts, chemists, detectives, and counsel as he shall duly authorize for the purpose shall have full access, egress, and ingress to all places of business, factories, farms, buildings, carriages, cars, vessels, and cans used in the manufacture, transportation, and sale of any dairy products, or of any adulteration or imitation thereof. They shall also have power and authority to open any package, can, or vessel containing dairy products, or any adulteration or imitation thereof, which may be manufactured, sold, or exposed for sale in violation of any of the provisions of any act now enacted or which may be hereafter enacted in relation to dairy products, or the adulteration or imitation thereof, and they shall also have power to take from such package, can, or vessel samples for analysis.

Disposition of penalties. SEC. 5. That all penalties and costs received by the said State board of agriculture for violations of the said act of May twenty-one, anno Domini one thousand eight hundred and eighty-five, and of other acts now enacted, or hereafter to be enacted, prohibiting or regulating the adulteration or imitation of butter, cheese, or other dairy products shall be appropriated by the said board to the payment only of the necessary expenses incurred by the said dairy and food commissioner and his assistants and agents in the investigation, discovery, and prosecution of violations of the said act.

Payment of expenses. SEC. 6. That all charges, accounts, and expenses of the said commissioner, and of all the assistants, agents, experts, chemists, detectives, and counsel employed by him, shall be paid by the treasurer of the State in the same manner as other accounts and expenses of the said State board of agriculture are now paid as provided by law.

Annual reports. SEC. 7. That the said commissioner shall make annual reports of his work and proceedings, and shall report in detail the number and names of the assistants, agents, experts, chemists, detectives, and counsel employed by him, with their expenses and disbursements, the number of prosecutions, the number of convictions, and the penalties recovered in each case, which report shall be presented to the said State board of agriculture at its annual meeting.

Session of 1895, No. 8.

AN ACT to establish a department of agriculture, and to define its duties and provide for its proper administration. (Approved March 13, 1895.)

Qualifications of dairy commissioner. SECTION 4. * * * The other officers of the department shall be appointed by the governor for the term of four years, and shall be * * * a dairy and food commissioner, who shall have practical experience in the manufacture of dairy products, * * * **Salary.** who shall receive an annual salary of twenty-five hundred dollars. The dairy and food commissioner shall, under the direction of the secretary, perform the duties prescribed by an act approved May twenty-sixth, one thousand eight hundred and ninety-three. * * * **Clerk.** The dairy and food commissioner shall have a clerk, who shall be appointed by the governor, and who shall serve under the direction of the * * * commissioner * * * and receive a salary of fifteen hundred dollars a year.

Session of 1895, No. 457.

AN ACT to enlarge the duties of the State food commissioner, authorizing him to enforce all laws against the adulterations or impurities in vinegar, jellies, cider, evaporated apples and all apple products, and the unlawful labeling in the State of Pennsylvania. (Approved July 5, 1895.)

Powers of commissioner extend to other foods. SECTION 1. That the State dairy and food commissioner shall be charged with the enforcement of all laws against fraud and adulteration or impurities in vinegar, jellies, cider, evaporated apples and all apple products, and the unlawful labeling of the same in the State of Pennsylvania.

Session of 1897, No. 118.

AN ACT to prohibit the adulteration or coloring of milk or cream by the addition of so-called preservatives or coloring matter, and to provide for the enforcement of the same. (Approved June 10, 1897.)

Preservatives prohibited. SECTION 1. That the sale or offering for sale of milk or cream for human consumption in this Commonwealth to which has been added boracic acid salt, boracic acid, salicylic acid, salicylate of soda, or

any other injurious compound or substance for artificially coloring the same, shall be a misdemeanor and punishable by a fine of not less than fifty nor more than one hundred dollars, or imprisonment not exceeding sixty days, or both, or either, at the discretion of the court.

Commissioner to enforce. SEC. 2. The agent of the department of agriculture, known as the dairy and food commissioner, shall be charged with the enforcement of all the provisions of this act, and shall have all the power to enforce this act that is given him to enforce the provisions of the act by which he receives his appointment.

Disposition of fines. SEC. 3. All penalties and costs for the violation of the provisions of this act shall be paid to the dairy and food commissioner or his agent, and by him paid into the State treasury, to be kept as a fund, separate and apart, for the use of the department of agriculture for the enforcement of this act, and to be drawn out upon warrant signed by the secretary of agriculture and the auditor-general.

Repealing clause. SEC. 4. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

Session of 1895, No. 236.

AN ACT to prohibit the adulteration of milk by the addition of so-called preservatives. (Approved June 28, 1895.)

Preservatives prohibited; penalty. SECTION 1. That the sale or offering for sale of milk for human consumption in this Commonwealth to which has been added boracic acid salt, boracic acid, salicylic acid, salicylate of soda, or any other acid, drug, compound, or substance, shall be a misdemeanor and punishable by a fine of not more than one hundred dollars, or an imprisonment not exceeding three months, or both, or either, at the discretion of the court.

Session of 1895, No. 186.

AN ACT to prevent the adulteration of, and the traffic in, impure and unwholesome milk in cities of the second and third class. (Approved July 7, 1895.)

Adulterated and diseased milk prohibited; where. SECTION 1. That in cities of the second and third classes whoever, by himself or by his servant or agent, or as the servant or agent of any other person, sells, exchanges, or delivers, or has in his custody or possession with intent to sell or exchange, or exposes or offers for sale or exchange, adulterated milk, or milk to which water or any foreign substance has been added, or milk produced from cows fed upon any substance in a state of putrefaction, or from sick or diseased cows, shall, for such offense, be punished by a fine of not less than twenty nor more than one hundred dollars.

Skimmed milk. SEC. 2. Whoever, by himself or by his servant or agent, or as the servant or agent of any other person, sells, exchanges, or delivers, or has in his custody or possession with intent to sell or exchange, or exposes or offers for sale as pure milk, any milk from which the cream or any part thereof has been removed shall, for such offense, be punished by the penalty provided in the preceding section.

Vessels of skimmed milk to be labeled. SEC. 3. No dealer in milk, and no servant or agent of such a dealer, shall sell, exchange, or deliver, or have in his custody or possession with intent to sell, exchange, or deliver, milk from which the cream or any part thereof has been removed unless in a conspicuous place above the centre of the outside of every vessel, can, or package from or in which such milk is sold the words "Skimmed milk" are distinctly painted in letters not less than one inch in length. Whoever violates the provisions of this section shall, for such offense, be punished by the penalty provided in section one of this act.

Milk standard. SEC. 4. If the milk mentioned in sections one and two of this act is shown, upon analysis, to contain more than eighty-seven and fifty one-hundredths per centum of watery fluid, and to contain less than twelve and fifty one-hundredths per centum of milk solids, and less fat than three per centum, and if the specific gravity at sixty degrees Fahrenheit is not between one and twenty-nine one-thousandths to one and thirty-three one-thousandths, it shall be deemed to be adulterated.

Skim milk standard. SEC. 5. If the skim milk mentioned in section three of this act is shown, upon analysis, to contain less than six per centum of cream by volume, and less than two and five-tenths per centum of fat by weight, and if the specific gravity at sixty degrees Fahrenheit is not between one and thirty-two thousandths to one and thirty-seven thousandths, it shall be deemed to be adulterated.

Securing evidence. SEC. 6. Whenever the inspector of milk has reason to believe that any milk found by him is adulterated, he shall take specimens thereof and test the same with such instrument or instruments as are used for the purpose, and if the result of such test indicates that the milk has been adulterated or deprived of its cream, or any part thereof, the same shall be *prima facie* evidence of such adulteration in prosecutions under this act. If the said inspector shall deem it necessary, he shall cause such milk to be analyzed, the result of such analysis he shall record and keep as evidence in prosecutions under this act. The expense of such analysis, not exceeding fifteen dollars in any one case, may be included in the costs of such prosecutions.

Prosecutions. SEC. 7. It shall be the duty of the inspector of milk to commence proceedings in the name of the board of health for any violations of the provisions of this act, from his own knowledge, or on the information of any person giving satisfactory evidence to him of such violations before any mayor, deputy mayor, or alderman of said cities. The recovery of fines or penalties imposed and inflicted on any person by the provisions of this act shall be for the use of said board of health, and upon nonpayment of the fines or penalties imposed and inflicted as aforesaid, such person shall be committed to the county jail for a period not exceeding thirty days.

Additional penalty. SEC. 8. That, in addition to the fines mentioned in the foregoing sections of this act, any person or persons violating the same shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be liable to a fine of not less than fifty nor more than one hundred dollars, or by imprisonment in the county jail for not less than ten nor more than thirty days, or both, or either at the discretion of the court.

Repealing clause. SEC. 9. All laws and parts of laws inconsistent herewith be, and the same are hereby, repealed.

Session of 1869, No. 56.

AN ACT to authorize the councils in cities and boroughs in this Commonwealth to provide for the inspection of milk. (Approved April 20, 1869.)

Inspection of milk in cities and boroughs. That the councils of cities and boroughs in this Commonwealth be, and the same are hereby, authorized and empowered to provide for the inspection of milk, under such rules and regulations as will protect the people from adulteration and dilution of the same.

Session of 1878, No. 183.

AN ACT to prevent the adulteration of milk and prevent the traffic in impure and unwholesome milk. (Approved May 25, 1878.)

Sale of adulterated milk a misdemeanor. SECTION 1. That any person or persons who shall knowingly sell or exchange, or expose for sale or exchange, any impure, adulterated, or unwholesome milk, shall be deemed guilty of a misdemeanor, and on conviction, shall be punished by a fine of not less than twenty dollars for each and every offense; and if the fine be not paid, shall be imprisoned for not less than fifteen days, or until said fine shall be paid.

Adulteration; penalty. SEC. 2. That any person who shall adulterate milk, with the view of offering the same for sale or exchange, shall be deemed guilty of a misdemeanor, and on conviction, shall be punished by a fine of not less than ten dollars for each and every offense; and if the fine be not paid, shall be imprisoned for not less than eight days, or until said fine is paid.

Delivery wagons to be marked; penalty. SEC. 3. That any person or persons who shall, in any cities, boroughs, and villages, having a population of one thousand inhabitants and upwards, engage in or carry on the sale, exchange, or traffic in milk, shall have the carriage or vehicle from which the same is vended conspicuously marked with his, her, or their names, also indicating the locality from whence said milk is obtained or where produced; and that for every neglect of such marking, the person or persons so neglecting shall be subject to the penalties provided for in section second of this act.

SEC. 4. That for marking wagons or vehicles, so as to convey the idea that said milk is produced from or produced in a different locality than it really is, the person or persons so offending shall be subject to a fine of fifty dollars, or imprisonment for not less than thirty days, or both, at the discretion of the court.

Adding water; using unwholesome food. **SEC. 5.** That the addition of water or of ice to the milk is hereby declared an adulteration; any milk obtained from animals fed on distillery waste or any substance in a state of putrefaction, is hereby declared to be impure and unwholesome.

In effect. **SEC. 6.** That this act shall take effect immediately after its passage.

Session of 1895, No. 258.

AN ACT creating a bureau of health in the department of public safety in cities of the second class. (Approved June 28, 1895.)

Registration of dairies and milk depots. **SECTION 14.** It shall be the duty of the bureau of health to make a complete registration of all dairies and milk depots in the said cities, and to require the names of the owners of the different dairies, or of the persons dealing in milk, to be legibly placed upon every vehicle used in the conveyance of milk; and any person or persons refusing or neglecting to give such information, or to place his or their name or names on said vehicles as aforesaid, shall be liable to a fine of not more than twenty dollars for each and every day the same shall be omitted.

Offering adulterated milk; penalty. **SEC. 15.** It shall be unlawful for any person or persons to offer for sale any milk adulterated with water or other substance, or any milk from diseased cows or goats; and if any person or persons shall violate any of the provisions of this section, he or they shall be liable to a fine of not more than fifty dollars for each and every offense so committed.

Bureau of health to enforce. **SEC. 16.** It shall be the duty of the said bureau of health to see that the provisions of sections fourteen and fifteen of this act are enforced; and for that purpose its officers shall have the right at all times to enter all places where milk may be sold, or stop any vehicle used in conveying the same, and cause a sample to be tested or analyzed.

Milk wagons to be marked. **SEC. 17.** Any person or persons who shall in any of said cities engage in or carry on the sale, exchange, or traffic in milk, shall have the carriage or vehicle from which the same is vended, conspicuously marked with his, her, or their names, also designating the locality from which said milk is obtained or where produced, and for every neglect of such marking, the person or persons so neglecting shall be subject to a fine not exceeding ten dollars. For marking wagons or vehicles so as to convey the idea that said milk is procured from or produced in a different locality than it really is, the person or persons so offending shall be subject to a fine not exceeding fifty dollars. The addition of water or of ice to milk is hereby declared an adulteration, and any milk obtained from animals fed on distillery waste or any substance in a state of putrefaction is hereby declared to be impure and unwholesome.

Session of 1885, No. 25.

AN ACT for the protection of the public health, and to prevent adulteration of dairy products and fraud in the sale thereof. (Approved May 21, 1885.)¹

Imitations and substitutes of butter and cheese prohibited. **SECTION 1.** That no person, firm, or corporate body shall manufacture out of any oleaginous substance or any compound of the same, other than that produced from unadulterated milk or of cream from the same, any article designed to take the place of butter or cheese produced from pure unadulterated milk, or cream from the same, or of any imitation or adulterated butter or cheese, nor shall sell or offer for sale, or have in his, her, or their possession with intent to sell the same as an article of food.

No action for sales. **SEC. 2.** Every sale of such article or substance, which is prohibited by the first section of this act, made after this act shall take effect, is hereby declared to be unlawful and void, and no action shall be maintained in any of the courts of this State to recover upon any contract for the sale of any such article or substance.

¹ The Department of Agriculture has issued a circular dated April 22, 1898, defining "renovated" butter and causing it to be plainly labeled.

Penalty; disposition of fines. SEC. 3 (as amended by the act of June 26, 1895). Every person, firm, or corporate body who shall manufacture, sell, or offer or expose for sale, or have in his, her, or their possession, with intent to sell, any substance, the manufacture and sale of which is prohibited by the first section of this act, shall, for every such offense, forfeit and pay the sum of one hundred dollars, which shall be recoverable with costs, by any person suing in the name of the Commonwealth, as debts of like amount are by law recoverable, one-half of which sum when so recovered shall be paid to the proper county treasurer for the use of the county in which the suit is brought, and the other half shall be paid to the dairy and food commissioner, or his agent, and by him covered into the State treasury, to be kept as a fund, separate and apart, for the use of the department of agriculture for the enforcement of this act, and to be drawn out upon warrants approved and signed by the secretary of agriculture and the auditor-general.

Penalty. SEC. 4. Every person who violates the provisions of the first section of this act shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than one hundred dollars nor more than three hundred, or by imprisonment in the county jail for not less than ten nor more than thirty days, or both such fine and imprisonment for the first offense, and imprisonment for one year for every subsequent offense.

Reports from constables. SEC. 5. It shall be the duty of constables of the several cities, boroughs, wards, or townships of this Commonwealth, to make quarterly reports under oath to the courts of quarter sessions of all violations of any of the provisions of this act which may come or be brought to their notice, and it shall be the duty of the judges of the said courts to see that the said returns are made regularly and faithfully.

In effect. SEC. 6. This act shall take effect on the first day of July, one thousand eight hundred and eighty-five.

Repealing clause. SEC. 7. All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

Session of 1897, No. 164.

AN ACT to prevent fraud and deception in the manufacture and sale of cheese, and defining what shall constitute the various grades of cheese, providing rules and regulations for marking and branding the same, providing for the enforcement of this act, prescribing penalties for its violation. (Approved June 23, 1897.)

Impure cheese prohibited. SECTION 1. That no person, firm, or corporate body shall manufacture, sell, offer for sale, or have in his or their possession with intent to sell any cheese not the legitimate product of pure, unadulterated milk or cream, or any cheese into which any foreign fats or substances have been introduced, as may appear upon proper test.

All cheese to be branded. SEC. 2. All cheese manufactured or sold within this Commonwealth shall be divided into five grades, and shall be branded or stenciled in ordinary bold-faced capital letters, not less than one inch in height, on two sides of each cheese, and upon the top and bottom of box or case containing the cheese, the manufacturer's name and post-office address, and the words "Full cream," "Three-fourths cream," "One-half cream," "One-fourth cream," and "Skimmed cheese." All cheese branded "Full cream" shall contain not less than thirty-two per centum of butter fat, as may appear by proper test. All cheese branded "Three-fourths cream" shall contain not less than twenty-four per centum of butter fat, as may appear by proper test. All cheese branded "One-half cream" shall contain not less than sixteen per centum of butter fat, as may appear upon proper test. All cheese branded "One-fourth cream" shall contain not less than eight per centum of butter fat, as may appear upon proper test. And all cheese containing less than eight per centum of butter fat, as may appear upon proper test, shall be branded "Skimmed cheese."

Penalty. SEC. 3. Every person, firm, or corporation who shall violate any of the provisions of this act shall, for every such offense, forfeit and pay the sum of not less than fifty dollars nor more than one hundred dollars, together with all charges and expenses for inspection and analysis connected therewith by any person suing therefor in the name of the Commonwealth, as debts of like amount are by law recoverable; and justices of the peace and aldermen throughout this Commonwealth shall have jurisdiction to hear and determine all actions arising under the provisions of this act, and all cheese not in accordance with this act

shall be subject to forfeiture and spoliation: *Provided*, That the department of agriculture, through its officers known as the dairy and food commissioner, together with his deputies, agents, and assistants, shall be charged with the enforcement of the provisions of this act, and shall have authority to enter any building or factory where the same is sold or manufactured or exposed for sale, and shall have the right to take samples sufficient for analysis upon tendering the value thereof. All fines and penalties, including also all charges for inspection and analysis, shall be paid to the dairy and food commissioner, his deputies, agents, or assistants, and by him immediately covered into the State treasury, and so much of said fund as may be necessary for the enforcement of this act shall be drawn out upon warrants signed by the secretary of agriculture and auditor-general: *Provided*, That the provisions of this act shall not be construed to apply to such cheese as is known as "fancy" cheese and is under five pounds in weight each, or to what is known as cottage cheese or pot cheese, and do not contain anything injurious to health.

SEC. 4. This act shall take effect sixty days after its approval by the governor of the Commonwealth.

Session of 1893, No. 65.

AN ACT to prohibit the use of any adulteration or imitation of dairy products in any charitable or penal institution, being supplementary to an act entitled "An act for the protection of the public health and to prevent adulteration of dairy products and fraud in the sale thereof," approved May twenty-one, anno Domini one thousand eight hundred and eighty-five. (Approved May 23, 1893.)

SECTION 1. That it shall not be lawful for any charitable or penal institution in the State of Pennsylvania to use, furnish to its inmates, any substance the manufacture or sale of which is prohibited by section one of the act entitled "An act for the protection of the public health and to prevent the adulteration of dairy products and fraud in the sale thereof," approved May twenty-first, anno Domini one thousand eight hundred and eighty-five.

SEC. 2. That any officer, agent, steward, or other official of any such charitable or penal institution who shall knowingly buy any substance the manufacture or sale of which is prohibited by section one of the said act of May twenty-one, anno Domini one thousand eight hundred and eighty-five, for use in such charitable or penal institution, or who shall knowingly cause such substance to be used by the inmates of such charitable or penal institution, shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine not exceeding one thousand dollars or imprisonment not exceeding two years for each offense, or either or both, at the discretion of the court.

SEC. 3. Every person who shall knowingly sell or offer for sale to any officer, agent, steward, or other official of any charitable or penal institution any substance the manufacture or sale of which is prohibited by section one of the said act of May twenty-first, anno Domini one thousand eight hundred and eighty-five, for use in such charitable or penal institution, shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine not exceeding one thousand dollars or by imprisonment not exceeding two years, or either or both, at the discretion of the court.

Session of 1895, No. 233.

AN ACT to provide against the adulteration of food and providing for the enforcement thereof. (Approved June 23, 1895.)

SECTION 1. That no person shall, within this State, manufacture for sale, offer for sale, or sell any article of food which is adulterated within the meaning of this act.

SEC. 2. The term "food," as used herein, shall include all articles used for food or drink by man, whether simple, mixed, or compound.

SEC. 3. An article shall be deemed to be adulterated within the meaning of this act—

"Adulterated" defined. (a) In the case of food: (1) If any substance or substances have been mixed with it so as to lower or depreciate or injuriously affect its quality, strength, or purity. (2) If any inferior or cheaper substance or substances have been substituted wholly or in part for it. (3) If any

valuable or necessary constituent or ingredient has been wholly or in part abstracted from it. (4) If it is an imitation of or is sold under the name of another article. (5) If it consists wholly or in part of a diseased, decomposed, putrid, infected, tainted, or rotten animal or vegetable substance or article, whether manufactured or not, or, in the case of milk, if it is the product of a diseased animal. (6) If it is colored, coated, polished, or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is. (7) If it contains any added substance or ingredient which is poisonous or injurious to health: *Provided*, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles or ingredients of articles of food if each and every package sold or offered for sale be distinctly labeled as mixtures or compounds and are not injurious to health.

Samples to be furnished. SEC. 4. Every person manufacturing, offering or exposing for sale, or delivering to a purchaser any article of food included in the provisions of this act shall furnish to any person interested or demanding the same, who shall apply to him for the purpose and shall tender him the value of the same, a sample sufficient for the analysis of any such article of food which is in his possession.

Penalty. SEC. 5. Whoever refuses to comply, upon demand, with the requirement of section four, and whoever violates any of the provisions of this act, shall be guilty of a misdemeanor, and upon conviction shall be fined not exceeding one hundred nor less than fifty dollars, or imprisoned not exceeding ninety nor less than thirty days, or both, and any person found guilty of manufacturing, offering for sale, or selling any adulterated article of food under the provisions of this act shall be adjudged to pay, in addition to the penalties herein provided for, all the necessary costs and expenses incurred in inspecting and analyzing such adulterated articles of which said person may have been found guilty of manufacturing, selling, or offering for sale: *Provided*, That all penalties and costs for the violation of the provisions of this act shall be paid to the dairy and food commissioner or his agent, and by him paid into the State treasury, to be kept as a fund separate and apart for the use of the department of agriculture for the enforcement of this act, and to be drawn out upon warrant signed by the secretary of agriculture and the auditor-general.

Commissioner to enforce. SEC. 6. The agent of the department of agriculture, known as the dairy and food commissioner, shall be charged with the enforcement of all the provisions of this act, and shall have the same power to enforce the provisions of this act that is given him to enforce the provisions of the act by which he receives his appointment.

RHODE ISLAND.

GENERAL LAWS OF 1896, Chapter 140.¹

Butter tubs to be branded. SECTION 1. Every person who shall make or bring into the State any butter firkins or tubs shall brand or mark each one of the same with the weight thereof and with the initial letters of his name, in a plain and durable manner, before he offers the same for sale.

Same. SEC. 2. No person shall offer for sale any butter by the firkin or tub unless each firkin and tub shall be branded or marked as aforesaid.

Penalty. SEC. 3. Every person who shall offer for sale any butter firkin or tub before the same shall be marked or branded as required in section one of this chapter, or any butter by the firkin or tub in any firkin or tub not marked or branded as aforesaid, or in any firkin or tub which shall weigh more than the mark or brand on it, allowing two pounds additional for the brine absorbed by the same, shall forfeit five dollars, unless there shall be a special contract in relation to the kind, quantity, and quality of the article sold.

Butter imitations to be marked "Oleomargarine." SEC. 4. Every person who shall manufacture for sale or who shall offer or expose for sale any article or substance in semblance of butter not the legitimate product of the dairy and not made exclusively from milk or cream, but into which the oil or fat of animals, not produced from milk, enters as a component part, or into

¹ Public Statutes, 1882, Chapter 127.

which melted butter or any oil thereof has been introduced to take the place of cream, shall distinctly and durably stamp, brand, or mark upon the top and side of every tub, firkin, box, or package of such article or substance the word "Oleo-margarine," in letters at least one-half inch in length; and in case of Retail sales. retail sale of such article or substance in parcels the seller shall in all cases deliver therewith to the purchaser a written or printed label bearing the plainly written or printed word "Oleo-margarine;" and every sale of such article or substance not so stamped, branded, marked, or labeled shall be unlawful; and no action shall be maintained in any of the courts of the State to recover on any contract for sale of any such article or substance not so stamped, branded, marked, or labeled.

Penalty. SEC. 5. Every person who shall knowingly sell or offer to sell or expose for sale or have in his possession with intent to sell, contrary to the provisions of this chapter, any of the said article or substance required by section four of this chapter to be stamped, branded, marked, or labeled as therein stated, or in case of retail sale without delivery of the label required by section four of this chapter, shall for each such offense be fined one hundred dollars, one-half thereof to the use of the complainant and one-half thereof to the use of the State; and on trial of such offense proof of the sale or offer to sell or of the exposure for sale Evidence on trial. shall be evidence of knowledge of the character of the article so sold or offered or exposed and of knowledge that the same was not marked, branded, stamped, or labeled as required by this chapter.

Chapter 147.

Milk to be sold by wine measure. SECTION 1. Milk shall be sold by wine measure, and all measures used in the sale of milk shall be sealed Measures to be sealed. by the sealer of weights and measures of the town where the person so using the same shall usually reside, or of the town where such milk shall be measured for use; and every person violating Penalty. the provisions of this section shall forfeit ten dollars for each offense.

Election of inspectors of milk. SEC. 2. The mayor and aldermen of any city, and the town council of any town, may annually elect one or more persons to be inspectors of milk therein, who shall be engaged to the faithful discharge of the duties of their office. Every such inspector shall give notice of his election by publishing notice thereof for two weeks in some newspaper published in the city or town for which he shall be appointed, or, if no newspaper be published therein, by posting up such notice in two or more public places in such city or town: *Provided*, That the mayor and aldermen of the city of Providence Election in Providence. shall annually, in the month of August, elect such person or persons to be inspectors of milk, and may, at any time during the year thereafter, fill by election any vacancy occurring by reason of death, resignation, absence from the city, or inability to act.

Duties and powers of inspectors. SEC. 3. Every inspector of milk shall have an office and a book for the purpose of recording the names and places of business of all persons engaged in the sale of milk within the limits of his town. He may enter any place where milk is stored or kept for sale and examine all carriages used in the conveyance of milk, and whenever he has reason to believe any milk found by him is adulterated, he shall take specimens thereof and cause the same to be analyzed or otherwise satisfactorily tested, the result of which he shall record and preserve as evidence; and a certificate of such result, sworn to by the analyzer, shall be admissible in evidence in all Compensation. prosecutions under this chapter. Such inspector shall receive such compensation as the mayor and aldermen or town council shall determine.

Inspector to take samples of food suspected. SEC. 4. Whenever the inspector of milk shall have reason to believe that adulterated produce or food is being sold or kept for sale contrary to law, he shall take at least two specimens from the same package or bulk as samples thereof, such specimens, if solid, not to exceed in weight one pound each, and, if liquid, not to exceed in measure one pint each. He shall take said samples in the presence of the owner or his agent, and shall seal and label the same in the presence of such owner or agent, said labels to state the kind of provisions or food and the name of the seller, and shall then and there deliver one of said samples to such owner or agent.

¹ Public Statutes, 1882, chapter 127, (15 R. I. 208); also Laws 1891, chapter 1024, section 1, and chapter 979, section 1; also Laws 1882, chapter 270, sections 1-4; (10 Rhode Island, 258; 14 Rhode Island, 100); also Laws 1886, chapter 500, section 1.

SEC. 5. Whoever, engaging in or being engaged in the business of selling milk and conveying the same for sale, neglects to cause his name and place of business to be recorded in the inspector's book, and his name to be legibly and conspicuously placed and constantly kept upon all carriages and vehicles used by him in the conveyance of milk or in the sale thereof; and whoever, being engaged in the business of selling milk and conveying the same for sale, shall neglect to renew such record annually between the first day of February and the first day of March, shall forfeit twenty dollars for the first offense and fifty dollars for the second and each subsequent offense; and whoever offers for sale milk produced from cows fed upon the refuse of distilleries or any substance deleterious to the quality of the milk, and whoever offers for sale milk produced from sick or diseased cows, shall be fined twenty dollars for the first offense and fifty dollars for every subsequent offense; and whoever, in the employment of another, violates any provision of this section, shall be held equally guilty with the principal, and shall suffer the same penalty.

SEC. 6. No person shall sell or exchange or have in his possession, with the intent to sell or exchange, or offer for sale or exchange, adulterated milk or milk to which water or any foreign substance has been added.

SEC. 7. Every person who shall sell, exchange, or deliver, or shall have in his custody or possession with the intent to sell or exchange or deliver, for himself or as the employee of any other person, milk from which the cream or any part thereof has been removed, or which shall not contain two and one-half per centum of milk fats, shall distinctly mark, in letters not less than one inch in length, in a conspicuous place above the center, upon the outside of every vessel, can, or package containing such milk, the words "Skimmed milk," and such milk shall only be sold in or retailed out of a can, vessel, or package so marked.

SEC. 8. In all prosecutions under sections six and seven of this chapter, if the milk shall be shown upon analysis to contain more than eighty-eight per centum of watery fluids, or to contain less than twelve per centum of milk solids, or less than two and one-half per centum of milk fats, it shall be deemed for the purpose of said sections to be adulterated.

SEC. 9. Every person who shall be found guilty before a district court of violating any of the provisions of the three sections next preceding, upon the first conviction shall be fined twenty dollars; and upon the second, and every subsequent conviction, shall be fined twenty dollars and be imprisoned in the county jail for ten days.

SEC. 10. Every inspector of milk shall institute complaints on the information of any person who shall lay before him satisfactory evidence by which to sustain the same.

SEC. 11. Every inspector of milk shall cause the provisions of this chapter to be published in his town at least three times in some newspaper published in said town or some newspaper in the county in which the town is situated.

SEC. 12. Every inspector of milk shall cause the name and place of business of all persons convicted under this chapter to be published in two newspapers published in the town or county where the offense shall have been committed.

SEC. 13. Any chief of police and any inspector of milk, and such special constables as the town council of any town, or the board of aldermen of any city, may appoint for that purpose, may make complaints and prosecute for all violations within the city or town wherein they are appointed or elected, of any of the provisions of this chapter; and they each shall be exempt from giving surety for costs on any complaint made as aforesaid.

LAWS OF 1896, Chapter 333.

AN ACT in amendment of and in addition to chapter 147 of the General Laws, entitled "Of milk." (Passed May 18, 1896.)

SECTION 1. Any inspector of milk of any town or city now in office or hereafter elected under authority of chapter 147 of the General Laws, entitled "Of milk," or of any act in amendment thereof, may employ, subject to

the approval of the town council or the mayor and aldermen, one person as collector of samples, who shall have the same powers and be subject to the same duties and liabilities provided by law relative to the taking of specimens or samples, as an inspector of milk. All specimens or samples taken and retained by any such collector shall be delivered to such inspector, who shall have the same powers and duties relative to the same as in case of specimens or samples taken by himself. Such inspector at any time may discontinue the employment of any such collector, and, subject to the approval aforesaid, employ another person in his stead. Such collector upon being employed shall be duly engaged to the faithful discharge of his duties before the city or town clerk, who shall keep a record thereof; and shall receive such salary as the mayor and aldermen or town council shall determine.

SEC. 2. Wherever in said chapter 147 of the General Laws the word "forfeit" appears, the same is hereby stricken out, and the words "be fined" are hereby substituted in lieu thereof.

IN EFFECT. SEC. 3. This act shall take effect from and after its passage.

SOUTH CAROLINA.

ACTS OF 1896, No. 96.

AN ACT to regulate the sale of milk and cheese, and to prescribe penalties for the unlawful sale or exposure for sale of any watered or adulterated or unwholesome milk and imitations or adulterations of butter and cheese. (Approved March 9, 1896.)

Impure, adulterated, etc., milk. SECTION 1. That it shall not be lawful for any person or corporation or agent knowingly to sell or expose for sale, or deliver for domestic use or to be converted into any product of human food whatsoever, any unclean, impure, unwholesome, adulterated, or skimmed milk, or milk from which has been held back what is known as strippings, or milk taken from an animal having disease, sickness, ulcers, or abscesses: *Provided*, That this section shall not prohibit the sale of butter-milk or of skimmed milk when sold as such.

Milk standard. SEC. 2. That for the purpose of this act, milk which is proven by any reliable test or analysis to contain less than three per centum of butter fat or eight and one-half per cent of solids other than butter fat shall be regarded as skimmed milk.

Imitation butter or cheese defined. SEC. 3. That for the purpose of this act, every article, substance, or compound, other than produced wholly from pure whole milk, or cream from the same, made in semblance of butter or of cheese, and designed to be used as a substitute for butter or cheese made from pure milk or cream from the same, is hereby declared to be imitation butter or imitation cheese, as the case may be: *Provided*, The use of salt, rennet, and harmless coloring matter for coloring the product of pure milk or cream shall not be construed to render such product an imitation.

Coloring matter prohibited. SEC. 4. That no person shall coat, powder, or color with annatto or any coloring matter whatever any substance designed to be used as a substitute for butter or for cheese whereby such substance or product shall be caused to resemble butter or cheese, the product of pure milk or cream.

Combinations of certain ingredients prohibited. SEC. 5. That no person shall combine any animal fat or vegetable oil or other substance with butter or cheese, or with animal fat or vegetable oil or combination of the two, or any other substance or substances whatever, any annatto or any other coloring matter for the purpose and with the effect of imparting thereto a yellow color, or any shade of yellow, so that such substances shall resemble genuine yellow butter or cheese, nor introduce any such coloring matter or any such substance into any of the ingredients of which such substitute may be composed: *Provided*, That nothing in this act shall be construed to prohibit the use of salt, rennet, or harmless coloring matter for coloring the product of pure milk or cream from the same.

Manufacture and sale of imitation butter or cheese regulated. SEC. 6. That no person shall by himself, or employee, or agent, produce or manufacture, or sell, or keep for sale, or offer for sale, any imitation butter or imitation cheese made or compounded in violation of this act, whether such imitation shall have been made or produced in this State or elsewhere: *Provided*, That this act shall not be construed to prohibit the manu-

facture and sale of imitation butter or imitation cheese, under the regulations hereinafter provided, not manufactured or colored as herein prohibited.

Substitutes to be marked. SEC. 7. That every person who lawfully manufactures any substance designed to be used as a substitute for butter or for cheese shall mark by branding, stamping, or stenciling upon the top and side of each tub, box, or other vessel in which such substitute shall be kept, or in which it shall be removed from the place where produced, in a clear and durable manner, in the English language, the words "Substitute for butter," or "Substitute for cheese," as the case may be, in printed letters in plain Roman type, each of which shall be not less than one inch in height and one-half inch in breadth.

Possession of unmarked imitations. SEC. 8. That no person shall have in his possession or control any substance designed to be used as a substitute for butter or for cheese unless the tub, box, or other vessel containing the same shall be clearly and durably marked as provided in section 7 of this act: *Provided*, That this section shall not apply to a person who has such imitation butter or imitation cheese in his possession for the actual consumption of himself and family.

Sale as genuine article prohibited. SEC. 9. That no person, by himself or agent or employee, shall sell or offer for sale any imitation butter or imitation cheese under the pretense that the same is genuine butter or genuine cheese.

Hotels and restaurants using imitations to post signs. SEC. 10. That no keeper or proprietor of any hotel or restaurant, or other person having charge thereof, shall knowingly use, or serve therein, either as food or for cooking purposes, any imitation butter or cheese, as defined in section 3 of this act, unless such keeper, proprietor, or other person in charge of such place of entertainment shall keep constantly posted in a conspicuous place in the room or rooms, or other place or places where such imitations shall be served, so that the same may be easily seen and read by any person in such room or place, a white card, not less than ten by fourteen inches in size, on which shall be printed in the English language, in plain black Roman letters, not smaller than one inch in height and one-half inch in width, the words "Imitation butter used here," or "Imitation cheese used here," as the case may be, and the cards shall not contain any other impressions than the words above prescribed.

Penalty. SEC. 11. That any person violating any provisions of this act shall be guilty of a misdemeanor and may be proceeded against by any of the processes provided for misdemeanors, and may be tried by any court having jurisdiction of misdemeanors in this State, and upon conviction shall be punished by a fine not to exceed one hundred dollars and not less than ten dollars, one-half of said fine to go to the informer through whose agency such conviction shall be had.

Evidence of chemist. SEC. 12. That the sworn certificate of the chemist of the Clemson Agricultural College, of South Carolina, of analysis of a suspected sample shall be recognized in any and all courts of this State as *prima facie* evidence of said analysis and of the composition and character of such sample.

In effect. SEC. 13. That this act shall take effect from and after its approval.

Repealing clause. SEC. 14. That all laws in conflict with this act be, and the same are hereby, repealed.

SOUTH DAKOTA.

COMPILED LAWS OF DAKOTA, 1887, Political Code, Article 5.¹

Duty of health officers. SECTION 2250. Every health officer, sheriff, deputy sheriff, or constable shall institute complaint for the violation of the two preceding sections whenever he has reasonable cause for suspicion and on the information of any person who shall lay before him satisfactory evidence of the same. Said officers shall take specimens of suspected butter or cheese, and cause the same to be analyzed or otherwise satisfactorily tested. The expense of such analysis or test, not exceeding twenty dollars in any one case, may be included in the costs of the prosecution, and taxed and allowed to the officer paying the same.

Butter and cheese defined. SEC. 2251. For the purpose of the three preceding sections, the terms "butter" and "cheese" mean the products usually known by those names, and which are manufactured exclusively from milk or cream, or both, with salt and rennet, and with or without coloring matter.

¹ Sections 2250, 2251 = Laws 1885, chapter 64, sections 5 and 6.

LAWS OF 1897, Chapter 65.

AN ACT to amend sections 2240, 2248, and 2249 of the Compiled Laws of 1887, the same being sections 1, 3, and 4, chapter 64, session laws of 1885, relating to adulteration of food and drink. (Approved March 3, 1897.)

Sales of unwholesome food or drink prohibited; **SECTION 1.** That section 2246 of the Compiled Laws of 1887 be amended to read as follows: "No person shall knowingly sell any kind of diseased, corrupted, or unwholesome provisions whether for meat or drink, without making the same fully known to the buyer, or shall fraudulently adulterate for the purpose of sale any substance intended for food, or any wine, spirits, or other liquor intended for drinking, or color, stain, or powder any article of food, drink, or medicine, or any article which enters into the composition of food, drink, or medicine, with any other ingredients or materials whether injurious to health or not, for the purpose of gain or profit, or sell or offer the same for sale, or order or permit any other person to sell or offer for sale any article so mixed, colored, stained, or powdered, unless the same be so manufactured, used, or sold, or offered for sale under its true and appropriate name, and notice that the same is mixed or impure is marked, printed, or stamped upon each package, roll, parcel, or vessel containing the same, so as to be and remain at all times readily visible or unless the person purchasing the same is fully informed by the seller of the true name and ingredients (if other than such as are known by the common name thereof) of such article of food, drink, or medicine at the time of making sale thereof or offering to sell the same: *Provided*, That nothing in this act shall be construed as to prevent the use of harmless coloring of butter or cheese made from the whole milk or cream, or as considering such coloring to be an adulteration, or requiring butter or cheese so made to be branded "Impure."

Imitations of butter prohibited. **SEC. 2.** That section 2248 be amended to read as follows: "No person by himself or his agents or servants shall render, or manufacture, sell, or offer for sale, take orders for future delivery, or have in his possession, keep in storage, distribute, deliver, transfer, or convey with intent to sell, within the State of South Dakota, any article, produce, or compound made wholly or partly out of any fat, oil, or oleomargarine substance or compound thereof, not produced from unadulterated milk or cream from the same, which shall be in imitation of butter produced from pure unadulterated milk or cream of the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in separate and distinct form, and in such a manner as will advise the consumer of its real character, free from coloration or ingredients that cause it to look like yellow butter: *And provided further*, That such substance or compound thereof, also, or oleomargarine, shall be colored pink."

Penalty. **SEC. 3.** Any person convicted of violating any of the provisions of sections 1 and 2 of this act shall be deemed guilty of a misdemeanor and punished with imprisonment in the county jail not to exceed six months nor less than three months, or by fine not to exceed two hundred dollars nor less than one hundred dollars.

Notice of use in hotels, etc. **SEC. 4.** That section 2249 be amended to read as follows: "Whoever furnishes or causes to be furnished in any hotel, restaurant, boarding house, or at any lunch county [counter], oleomargarine or butterine to any guest or patron of such hotel, restaurant, boarding house, or lunch counter in place or stead of butter, shall notify said guest or patron that the substance so furnished is not butter, and any party so furnishing without such notice shall be punished by a fine of not less than ten dollars or more than fifty dollars for each offense."

Repealing clause. **SEC. 5.** All acts or parts of acts inconsistent with the provisions of this act are hereby repealed.

In effect. **SEC. 6.** An emergency is hereby declared to exist, and this act shall take effect and be in full force from and after its passage and approval.

TENNESSEE.

ACTS OF 1879, Chapter 180.

AN ACT to prevent fraud in the sale of butter and cheese. (Approved March 29, 1879.)

Imitation butter and cheese shall be labeled. SECTION 1. That whoever manufactures, sells, or offers for sale, or causes the same to be done, any substance purporting to be butter or cheese, which substance is not wholly from pure cream or pure milk, unless the same be manufactured under its true and appropriate name, and unless each package, roll, or parcel of such substance, and each vessel containing one or more packages of such substance, have distinctly and durably printed, stamped, or marked thereon the true and appropriate name of such substance, in ordinary bold-faced capital letters, not less than five lines pica, shall be punished as provided in section 3 of this act.

Label with retail sales. SEC. 2. That whoever shall sell any such substance as is mentioned in section 1 of this act to consumers, or cause the same to be done, without delivering with each package, roll, or parcel so sold a label on which is plainly and legibly printed, in Roman letters, the true and appropriate name of such substance, shall be punished as is provided in section 3 of this act.

Penalty. SEC. 3. That whoever knowingly violates section 2 of this act shall be fined any sum not less than ten nor more than three hundred dollars, or imprisoned in the county jail not more than ninety nor less than ten days, or both, at the discretion of the court: *Provided*, That nothing contained in this act shall be construed to prevent the use of skim milk, salt, or rennet, or harmless coloring matter in the manufacture of butter and cheese.

In effect. SEC. 4. That this act shall take effect and be in force from and after its passage.

ACTS OF 1895, Chapter 101.

AN ACT to provide for labeling, stamping, or marking oleomargarine, butterine, and imitation butter, and to provide against coloring the same, and fixing the punishment for violation of this act. (Approved April 10, 1895.)

Imitation butter to be labeled. SECTION 1. That whoever, in person or by agent, sells, exposes for sale, or has in his possession with interest [intent] to sell, any article, substance, or compound made in imitation or semblance of butter, or as a substitute for butter, and not made exclusively and wholly of milk or cream, shall have the words "Imitation butter," or if such substitute is the compound known as oleomargarine, then the word "Oleomargarine," or if it be known by any other word, name, or term as a substitute for butter, stamped, labeled, or marked in a straight line in printed letters of plain, uncondensed Roman type not less than one-half inch in length and one-quarter inch in width, so that the said words, name, or term can not be easily defaced, upon the top side and bottom of every tub, firkin, box, or package containing any of said article, substance, or compound. The stamps or label or mark shall contain no other words.

Same. SEC. 2. That whoever, in person or by agent, exposes or offers for sale any of the said article, substance, or compound not in the original package shall attach to said article, substance, or compound, in a conspicuous place, a label bearing the words "Imitation butter," "Oleomargarine," "Butterine," or other name, word, or term, as the article may be, in printed letters of plain Roman type, as provided for in section 1 of this act.

Same; retail sales. SEC. 3. That in case of retail sales of any said article, substance, or compound not in the original package, the seller shall, in person or by agent, attach to each package so sold and deliver therewith to the purchaser a label or wrapper bearing, in a conspicuous place upon the outside of the package, the words provided for in this act, and no other, in printed letters, in a straight line, of plain Roman type, such as provided for in this act.

Imitations of yellow butter prohibited. SEC. 4. That no person, by himself, or agents, or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product, or compound, made wholly or partly out of any fat, oil, or oleaginous substance or compound thereof, not produced directly, and at the time of manu-

facture, from unadulterated milk or cream, from the same, which shall be in imitation of yellow butter, produced from pure unadulterated milk or cream, from the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine, butterine, or imitation butter in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter.

Penalty. SEC. 5. That whosoever shall fail or refuse to comply with the provisions of this act shall for the first offense be fined fifty dollars, and each subsequent offense shall be fined one hundred dollars.

In effect. SEC. 3 [6]. That this act take effect from and after its passage, the public welfare requiring it.

PUBLIC ACTS OF 1897, Chapter 45.

AN ACT to prevent the adulteration and misbranding of food and drink and the deception in the sale of the same in Tennessee, and to fix the penalty for the violation of this act. (Approved March 24, 1897.)

Any adulterated or misbranded food or drink is prohibited. SECTION 1. That the manufacture, importation, or sale, or offering for sale, any article of food or drink which is adulterated or misbranded, within

the meaning of this act, is hereby prohibited in Tennessee, and any company or individual who shall knowingly receive from without the State, or who, having so received, shall deliver for pay, or otherwise, or offer to deliver or sell or trade any such article so adulterated or misbranded, within the meaning of this act, shall be guilty of a misdemeanor, and for such offense shall be fined not less than

Penalty. twenty-five nor more than one hundred dollars for the first offense, and for each subsequent offense not less than two hundred dollars, or be imprisoned in the county jail not exceeding one year, or both, in the discretion of the court.

Chemical and biological laboratory. SEC. 2. That the State board of health be, and is hereby, authorized and directed to establish, under such rules and regulations as it may think best, a properly organized and fully equipped chemical and biological laboratory, in which, with such expert assistance as they may elect, shall be made such examinations of food and drink offered for sale in Tennessee as may be collected from time to time under such rules and regulations as said board may prescribe, and the results of such analyses or examinations they shall publish in bulletins for the information of the people, and it

Duty of State board of health. shall be the duty of the State board of health to see that the provisions of this act are fully carried out without any additional appropriations, nor is this act intended to create any office or allow compensation to any person or persons. But the names of the manufacturers or vendors of such foods or drink analyzed shall in no case be published, as hereinbefore indicated, until after conviction in the courts of violation of this act. If it shall appear from such examination that any of the provisions of this act have been violated, the State board of health shall at once cause a report of the fact to be made to the district attorney for the district in which such violations occurred, with a copy of the results of the analyses, duly authenticated by the expert making the examination under oath.

District attorneys to assist. SEC. 3. That it shall be the duty of every district attorney to whom said State board of health shall report any violations of this act to cause proceedings to be commenced and prosecuted without delay for the fines and penalties in such cases provided, unless upon inquiry and examination said district attorney shall decide that such proceedings can not probably be sustained, in which case said district attorney shall so report back to said State board of health.

Terms defined. SEC. 4. That the term "food and drink," used herein, shall include all articles used for food or drink by man, whether simple, mixed, or compound. The term "misbranded," as used herein, shall include all articles of food or drink, or which enter into the composition of such articles of food or drink, the package or label of which shall bear any statement purporting to name any ingredient or substance as not being contained in such article, which statement shall be false in any particular, or any statement purporting to name the substance of which such article is made shall not fully give the name of all the substances contained in such article in any measurable quantities.

Adulteration defined. SEC. 5. That for the purposes of this act an article shall be deemed adulterated in case of food or drink: First. If any substance or substances has or have been mixed and packed with it so as to reduce or lower or injuriously affect its quality or strength so that such product, when offered for sale, shall be calculated and shall tend to deceive the purchaser. Second. If any inferior substance or substances has or have been substituted, wholly or in part, for the article so that the product when sold shall tend to deceive the purchaser. Third. If any valuable constituent of the article has been wholly or in part abstracted so that the product when sold shall tend to deceive the purchaser. Fourth. If it be an imitation of and sold under the specific name of another article. Fifth. If it be mixed, colored, powdered, or strained¹ in a manner whereby danger is concealed so that such product, when sold, shall tend to deceive the purchaser. Sixth. If it contains any added poisonous ingredient or any ingredient which may render such article injurious to the health of the person consuming it. Seventh. If it consist of the whole or any part of a diseased, filthy, decomposed, or putrid animal or vegetable substance, or any portion of an animal unfit for food, whether manufactured or not, or if it is the product of a diseased animal, or of an animal that has died otherwise than by slaughter: *Provided*, That an article of food or drink which does not contain any added poisonous ingredient shall not be deemed Exceptions. to be adulterated in the following cases: First. In the case of mixtures or compounds which may be now or from time to time hereafter known as articles of food or drink under their own distinctive names and not included in definition fourth of this section. Second. In the case of articles labeled, branded, or tagged so as to plainly indicate that they are mixtures, compounds, combinations, or blends. Third. When any matter or ingredient has been added to the food or drink because the same is required for the production or preparation thereof, or an article of commerce in a state fit for carriage or consumption, and not fraudulently to increase the bulk, weight, or measure of the food or drink or conceal the inferior quality thereof: *Provided*, That the same shall be labeled, branded, or tagged as prescribed by the State board of health so as to show them to be compounds and the exact character thereof. Fourth. Where the food or drink is unavoidably mixed with some extraneous matter in the process of collection and preparation.

Taking samples. SEC. 6. That every person who manufactures or offers for sale or delivers to a purchaser any articles of food or drink shall furnish upon demand a sample of such article of food or drink to any person duly authorized by the State board of health to receive the same, and who shall apply to such manufacturer or vender or person delivering to any purchaser such article of food or drink for such sample for such use in sufficient quantities for the analysis of any such article or articles in his or her possession and in the presence of such dealer and an authorized agent of the said State board of health if so desired by either party, said sample shall be divided into three parts, and each part shall be sealed by the seal of the State board of health, one part shall be left with dealer, one delivered to the State board of health, and one to be deposited with the district attorney for the district in which the sample is taken. Said manufacturer or dealer may have the sample left with him analyzed at his own expense, and if the results of said analysis differ from those of the State board of health the sample in the hand of the district attorney shall be analyzed by a third chemist, or expert, who shall be chosen and agreed upon by the said dealer and the State board of health, and the whole evidence shall be laid before the court.

Penalty. SEC. 7. That whosoever refuses to comply upon demand with the requirements of section 6 of this act shall be guilty of a misdemeanor, and upon conviction shall be fined not exceeding one hundred dollars nor less than ten dollars, or imprisonment not exceeding three months nor less than thirty days, or both, and any person found guilty of the manufacturing or knowingly offering for sale or selling any adulterated, impure, or misbranded article of food or drink in violation of the provision of this act shall be adjudged to pay in addition to the penalties heretofore provided for all the necessary costs and expenses incurred in inspecting and analyzing such adulterated article which said person may have been found guilty of manufacturing, selling, or offering for sale.

Repealing clause. SEC. 8. That all laws or parts of laws coming in conflict with this act be and the same are hereby repealed, and that this act take effect thirty days after its passage, the public welfare requiring it.

¹ So in copy.

UTAH.

LAWS OF 1894, Chapter 63.

AN ACT to protect the dairy interests of the territory of Utah. (Approved March 8, 1894.)

Substitutes for butter and cheese to be marked. SECTION 1. That any person or persons in this Territory who shall manufacture for sale, or who shall sell, offer, or expose for sale, by the tub, firkin, box, or package, any article or substance in semblance of butter or cheese, not the legitimate product of the dairy, and not made exclusively of milk or cream, but into which any oil, fat, or lard, not produced from milk or cream, enters as a compound or a component part, shall distinctly stamp or mark on such tub, firkin, box, or package of such article or substance the words "Oleomargarine butter;" and if containing cheese, the words "Imitation cheese;" and where retail sales are made of such articles, the seller shall in all cases sell, offer, or expose for sale such article from a tub, firkin, box, or package stamped or marked as herein stated.

Use of colors prohibited. SEC. 2. It shall be unlawful for any person to coat, powder, or color, with any coloring whatever, any "oleomargarine," "butterine," or any compound of the same, or any product made in whole or in part from animal fat or animal or vegetable oil not produced from unadulterated milk or cream, whereby the said product shall be made to resemble butter or cheese, the product of the dairy.

Sale of impure milk and milk products forbidden. SEC. 3. No person or persons shall sell or exchange, or expose for sale or exchange, any unclean, impure, adulterated, or unwholesome milk, or shall offer for sale any article of food made from the same or of the cream of the same.

SEC. 4. Any person violating the provisions of this act shall be guilty of a misdemeanor.

In effect. This act shall take effect from and after its approval.

VERMONT.

VERMONT STATUTES, 1894.¹

Wine measure for milk. SECTION 4300. The standard measure of milk shall be wine measure.

Milk, dilution or adulteration; penalty. SEC. 4327. A person who sells or furnishes, or has in his possession with intent to sell or furnish, milk diluted with water, adulterated, or not of good standard quality; or from which the cream or any part has been taken, or keeps back part of the milk known as "strippings" shall, for each offense, be fined not more than three hundred dollars and not less than fifty dollars.

Standard for payment in factories. SEC. 4328. In all creameries and cheese factories in this State milk containing four per cent of butter fat shall be the standard used as a paying basis.

Samples tested and used in evidence, when. SEC. 4329. Where, in prosecutions under the second preceding section the ordinary means of proof are not available or sufficient, sealed samples of the milk sold or furnished, or kept with intent to be sold or furnished, taken from such milk in the presence of at least one disinterested witness and with the knowledge and in the presence of the person or his agent or servant so selling or furnishing, or having in his possession with intent to sell or furnish said milk, may be sent to the State agricultural experiment station to be tested; the result of such test shall be deemed competent evidence in such prosecutions, but shall not exclude other evidence.

Disposition of samples. SEC. 4330. Said samples shall be placed in tin or glass vessels securely sealed with a label thereon stating the time when, [and] place where the sample was drawn, from whose milk taken, and signed by the person taking the same and by one or more disinterested witnesses. Upon

¹ Sec. 4300=Laws 1876, No. 106; R. L. 1890, § 3712. Sec. 4327=Laws 1888, No. 108, § 1. Sec. 4328=Laws 1894, No. 113. Secs. 4329-4331=Laws 1888, No. 108, §§ 2, 3. Sec. 4332=Laws 1888, No. 108, §§ 4, 5; 1892, No. 108. Sec. 4333=Laws 1888, No. 108, § 6. Secs. 4334, 4335=Laws 1890, No. 53, § 1. Sec. 4336=Laws 1894, No. 88; 1896, No. 71, § 1; 1890, No. 53, § 2. Sec. 4337=Laws 1886, No. 71, §§ 2, 3; 1890, No. 53, § 3. Secs. 4338-4340=Laws 1890, No. 53, §§ 4, 5, 6. Sec. 4975=Laws 1874, No. 59; R. L. 1890, § 4165. Sec. 4976=Laws 1895, No. 61; 1870, No. 76; R. L. 1890, § 4166.

request a like sample shall be given to such person, his agent or servant, for which a receipt shall be given to the person taking or drawing the same.

Standard milk defined. SEC. 4331. Standard milk shall contain not less than twelve and one-half per cent of solids, or not less than nine and one-fourth of total solids exclusive of fat, except in the months of May and June, when it shall contain not less than twelve per cent of total solids. This rule shall govern tests made at the experiment station, and an officer or employee thereof found guilty of fraud in making tests shall be fined one thousand dollars.

Fraudulent marking or selling of butter or cheese; penalty. SEC. 4332. A person who marks or otherwise designates or causes to be marked or otherwise designated as "creamery" butter or cheese, or the packages in which it is contained, when such butter or cheese is not manufactured at a creamery, or sells or offers to sell any such butter or cheese so marked, shall be fined not more than three hundred dollars and not less than fifty dollars; provided that a person may brand, mark, or otherwise designate the product of his dairy as "private creamery," and in such case the name of the maker shall be plainly marked on each package so branded or designated.

Jurisdiction of justice. SEC. 4333. Justices shall have concurrent jurisdiction with the county court in prosecutions under the six preceding sections.

Imitation butter and cheese prohibited. SEC. 4334. No person by himself, his agent or servant, shall manufacture out of animal fat, or animal or vegetable oils not produced from unadulterated milk or cream, an article in imitation of butter or cheese, or mix with or add to milk, cream, or butter any acids or other deleterious substances, animal fats, or animal or vegetable oils so as to produce an article in imitation of butter or cheese.

Penalty. SEC. 4335. If a person violates the provisions of the preceding section he shall be fined not more than three hundred dollars and not less than one hundred dollars, or be imprisoned for not more than one year and not less than six months for the first offense; and for each subsequent offense shall be fined not more than one thousand dollars and not less than three hundred dollars, or imprisoned for one year. One-half of the fine shall go to the complainant.

Imitation of butter to be colored pink; penalty. SEC. 4336. If a person, by himself, his agent or servant, sells, exposes for sale, or has in his possession with intent to sell, any article made in imitation of butter that is of any other color than pink, he shall for every package sold or exposed for sale be fined fifty dollars, and for each subsequent offense one hundred dollars. One-half of the fine shall go to the complainant.

Victualers using imitation not pink subject to penalty. SEC. 4337. If a proprietor or keeper of a hotel, restaurant, boarding house, eating saloon, or other place where food is furnished to persons paying for the same places upon the table or has in his possession with intent to use any article made in imitation of butter that is of any other color than pink, he shall be fined fifty dollars for the first offense, and for each subsequent offense one hundred dollars. One-half of the fine shall go to the complainant.

Analysis of specimens; expense included in costs. SEC. 4338. The complainant may cause specimens of suspected butter or cheese to be analyzed or otherwise tested as to color and compounds; the expense of such analysis or test not exceeding twenty dollars in any one case may be included in the costs of prosecution.

Warrants to search for imitation butter, when issued. SEC. 4339. A justice of the peace may issue a warrant for searching, in the daytime, any store, hotel, boarding house, or other place where oleomargarine, butterine, or other substance imitating butter or cheese is suspected to be kept or concealed, when the discovery of such articles may tend to convict a person of an offense under the five preceding sections. No warrant shall be issued except upon the oath of some person that he has reason to suspect and does suspect that such article or articles are kept or concealed in the place to be searched.

Butter defined. SEC. 4340. The term "butter" shall mean the product usually known by that name, manufactured exclusively from milk or cream, or both, with or without salt or coloring matter.

Selling adulterated milk; penalty. SEC. 4975. A person who knowingly sells or furnishes or offers to sell milk diluted with water or adulterated shall forfeit to the person to whom such milk is sold or furnished not more than one hundred dollars and not less than twenty-five dollars, to be recovered in an action on this statute before a justice.

Fraud on or by butter or cheese manufacturers; penalty. SEC. 4976. A person who knowingly sells, supplies, or brings to be manufactured to a butter or cheese manufactory in the State milk diluted with water, or adulterated, or milk from which cream has been taken, or keeps back part of the milk known as "strippings;" or knowingly brings or supplies milk to a butter or cheese manufactory that is tainted or partly sour from want of care in the keeping of strainers, or vessels in which said milk is kept; or a butter or cheese manufacturer who knowingly uses or directs his employees to use cream from the milk brought to said butter or cheese manufacturers without the consent of the owners thereof shall forfeit not more than one hundred dollars and not less than twenty-five dollars, to be recovered in an action founded upon this statute, before a justice, in the name and for the benefit of those upon whom such fraud is committed.

VIRGINIA.

CODE OF 1887, Title 25, Chapter 84.¹

Butter may be branded according to quality. SECTION 1871. Each inspector of butter or lard shall examine all offered for inspection in tubs, firkins, kegs, or barrels exceeding in weight fifty pounds, and shall brand or stamp the same, if fit to pass, with the number "one," "two," or "three," as he may judge it to be of first, second, or third quality.

Delivery of adulterated, etc., milk to factory prohibited. SEC. 1899. Whoever shall knowingly sell, supply, or bring to be manufactured, to any cheese or butter manufactory in this State, any milk diluted with water, or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as skimmed milk, or whoever shall keep back any part of the milk known as strippings, or knowingly bring or supply to any cheese manufactory milk that is tainted or partly sour from want of proper care in keeping clean any vessel in which said milk is kept, after being notified of such taint or carelessness, or any cheese manufacturer who shall knowingly use, or direct any of his employees to use, for his or their individual benefit, any cream from the milk brought to the said cheese manufacturer without the consent of the owners thereof, shall, for each offense, forfeit not less than twenty-five nor more than one hundred dollars, to be recovered by any person upon whom such fraud is committed.

Use of cream at factory.

Penalty.

Imitation of butter or cheese to be marked. SEC. 1900. Every person who shall manufacture for sale, or who shall offer or expose for sale, any article or substance in semblance of butter or cheese not the legitimate product of the dairy and not made exclusively of milk or cream, but into which the oil or fat of animals not produced from milk enters as a component part, or into which melted butter or any oil thereof has been introduced to take the place of cream, shall distinctly and durably stamp, brand, or mark upon every tub, firkin, box, or package of such article or substance the word "Oleomargarine," in plain Roman letters, not less than half an inch square, placed horizontally in proper order, thus, "Oleomargarine." In all cases of retail sales of such article or substance in parcels the seller shall deliver therewith to the purchaser a written or printed label bearing the plainly written or printed word "Oleomargarine," in type or letters as aforesaid; and every sale of such article not so stamped, branded, marked, or labeled shall be void, and no action shall be maintained for the price thereof.

Penalty. SEC. 1901. If any person sell or offer for sale, or cause or procure to be sold or offered or exposed for sale, or have in his possession with intent to sell, contrary to the provisions of the preceding section, any article or substance required by said section to be stamped, marked, or labeled, or, in case of retail sales, without delivery of a label as required by said section, he shall for every such

¹1871.—Code 1849, chapter 88, section 27, page 418. 1899—1872-73, chapter 181, page 167. 1900, 1901—1879-80, chapter 64, sections 1-3, page 49.

offense be fined one hundred dollars, one-half to go to the informer and the other half to the Commonwealth. On the trial for such offense proof of the sale, or offer or exposure alleged, shall be presumptive evidence of knowledge of the character of the article so sold or offered.

ACTS OF 1891-92, Chapter 536.

AN ACT to prevent the adulteration of butter and cheese, and the sale of the same, and preserve the public health. (Approved March 1, 1892.)

Substitutes for butter and cheese prohibited. SECTION 1. That no person shall manufacture out of any oleaginous substance or substances, or any compound of the same other than that produced from unadulterated milk or the cream from the same, any article designed to take the place of butter or cheese produced from pure unadulterated milk or cream of the same, or shall sell or offer for sale the same as an article of food. This provision shall not apply to Skim cheese permitted. pure skim-milk cheese from pure skim milk. Whoever violates the provisions of this section shall be guilty of a misdemeanor, and be punished by a fine of not less than fifty nor more than one hundred dollars for the first offense, and for each subsequent offense shall be punished by a fine of not less than one hundred dollars nor more than five hundred dollars.

Imitations of butter and cheese prohibited. SEC. 2. That no person, by himself or his agents or servants, shall render or manufacture out of any animal fat or animal or vegetable oils not produced from unadulterated milk, or cream from the same, any article in imitation or semblance of natural butter or cheese produced from pure unadulterated milk or cream of the same, nor mix, compound with, or add to milk, cream, or butter any acids or other deleterious substances or any animal fat or animal oils not produced from milk or cream so as to produce any article or substance or any human food in imitation or semblance of natural butter or cheese, nor sell, keep for sale, or offer for sale any article, substance, or compound made, manufactured, or produced in violation of the provisions of this section, whether such article, substance, or compound shall be made or produced in this State or elsewhere. Whoever violates the provisions of this section shall be guilty of a misdemeanor, and be punished by a fine of not less than fifty nor more than one hundred dollars for the first offense, and for each subsequent offense shall be punished by a fine of not less than one hundred dollars nor more than two hundred and fifty dollars. Nothing in this section shall impair the provisions of the first section of this act.

Mixing foreign products with milk, cream, etc. SEC. 3. That no person shall manufacture, mix, or compound with or add to natural milk, cream, or butter any animal fats or vegetable oils, nor shall he make or manufacture any oleaginous substance not produced from milk or cream, with the intent to sell the same for butter or cheese

Oleaginous substances not to be sold as butter or cheese, when. made from unadulterated milk or cream, or have the same in his possession, or offer the same for sale with such intent; nor shall any article, substance, or compound so made or produced be sold, intentionally or otherwise, as and for butter and cheese

Coloring to resemble butter or cheese prohibited. the product of the dairy; no person shall coat, powder, or color with annatto [annatto], or any coloring matter whatever, butterine or oleomargarine, or any compound of the same, or any product or manufacture made in whole or in part from animal fats or animal or vegetable oils not produced from unadulterated milk or cream, whereby the said product, manufacture, or compound shall resemble butter or cheese the product of the dairy, or shall have the same in his possession with intent to sell the same, or shall sell or offer the same for sale. Whoever violates any of the provisions of this section shall be guilty of a misdemeanor, and be punished by a fine of not less than fifty nor more than one hundred dollars for the first offense, and shall be punished by a fine of not less than one hundred dollars nor more than two hundred and fifty dollars for each subsequent offense. This section shall not be construed to impair or affect the provisions of sections one and two of this act.

Use of imitations, etc., in hotels, etc., prohibited. SEC. 4. That no keeper or proprietor of any bakery, hotel, tavern, boarding house, restaurant, saloon, lunch counter, or place of public entertainment, or any person having charge thereof or employed thereat, shall keep, use, or serve therein, either as food for their guests, boarders, patrons, or customers, or for cooking purposes, any article made in violation of the provisions

Penalty. of sections one, two, and three of this act. Whoever violates the provisions of this section shall be guilty of a misdemeanor, and punished by a fine of not less than fifty nor more than two hundred dollars for each offense.

SEC. 5. That authority to impose such fines, with cost, as are enumerated in sections one, two, three, and four of this act shall vest in the same court that exercises jurisdiction of other criminal cases.

Repealing clause. **SEC. 6.** That all acts or parts of acts so far as they conflict with the provisions of this act are hereby repealed.

In effect. **SEC. 7.** This act shall be in force from its passage.

ACTS OF 1897-98, Chapter 146.

AN ACT to prevent deception in the manufacture and sale of imitation butter. (Approved January 29, 1898.)

Sale of oleaginous compounds prohibited, when. **SECTION 1.** That no person, by himself or his agents or servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product, or compound made wholly or partly from any fat, oil, or oleaginous substance or compound thereof not produced from unadulterated milk or cream of the same, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine, butterine, or kindred compounds in a separate and distinct form, and in such manner as will advise the customer of its real character, free from coloration or ingredient that causes it to look like butter.

Unlawful at eating places, etc., without sign. **SEC. 2.** That it shall be unlawful for any keeper or proprietor of any bakery, hotel, tavern, licensed boarding house, restaurant, saloon, lunch counter, or place of public entertainment to use oleomargarine, butterine, or kindred compound either in baking, making, or cooking of bread, cakes, pies, crackers, meat, fish, fowl, or other edibles; or to serve the same to guests or patrons without first exposing and exhibiting in their respective bakeries, stores, restaurants, and dining rooms, in a conspicuous public place, in large Roman letters not less than one inch square, a sign or placard with this inscription: "Imitation butter used here."

Penalty. **SEC. 3.** Whoever violates any of the provisions of section one or two of this act shall be punished by a fine of not less than fifty nor more than two hundred and fifty dollars, or by imprisonment in the jail of the county or corporation in which the offense is committed for a term not exceeding six months.

Jurisdiction. **SEC. 4.** Justices of the peace shall have jurisdiction to impose the penalty herein prescribed.

WASHINGTON.

LAWS, Session of 1895, Chapter 45. (Ballinger's Codes and Statutes, 1897, sections 2842-2863.)

AN ACT regulating the manufacture of dairy products, to prevent deception or fraud in the sale of the same or imitations thereof, providing for the appointment of a dairy commissioner and defining his duties; creating a State board of dairy commissioners and defining their duties; imposing certain duties upon the chemists of State institutions; providing penalties for violations of this law, making an appropriation, and declaring an emergency. (Approved March 11, 1895.)

Unmerchtable, adulterated, skimmed, impure, or unwholesome milk prohibited. **SECTION 1.** It shall be unlawful for any person to sell or offer for sale, or furnish or deliver to any creamery, cheese factory, corporation, person or persons whatsoever, as pure, wholesome, and unskimmed, any unmerchtable, adulterated, skimmed, impure, or unwholesome milk.

SEC. 2 (as amended by section 1 of chapter 15, session of 1897). In all prosecutions or other proceedings under this or any other law of this State relating to the sale or furnishing of milk, if it shall be proven that the milk sold or offered for sale, or furnished or delivered, or had in possession with intent to sell or offer for sale, or to furnish or deliver as aforesaid as pure, wholesome, or unskimmed milk, contain less than three per centum of pure butter fat, or less than eight per centum of milk solids other than fat, when subjected to chemical analysis or other satisfactory test, or it had been diluted, or any part

of its cream abstracted, or that it, or any part of it, was drawn from cows known by the person complained of to have been within fifteen days before or four days after parturition, or to have any disease, or ulcers, or other running sores, then,

Defining impure, etc., milk. and in either case, the said milk shall be held and judged to have been unmerchantable, adulterated, impure, or unwholesome, as the case may be; and if it shall appear that cows kept for the production of milk or cream, for market, or for sale or exchange, or for manufacturing their milk into articles of food, are kept in a crowded or unhealthful condition, or are being fed on undried brewer's grain, or upon any substance of an unhealthful nature, the milk or the cream from the same is hereby declared impure and unwholesome. Any milk or cream from the same that has been exposed or contaminated by emanations, discharges, or exhalations from persons or animals, or to which has been added any borax, boracic acid, salicylic acid, or any other poisonous substance which prevents or tends to prevent the normal bacterial actions of milk, is hereby declared to be impure and unwholesome.

Cheese to be branded with its grade. SEC. 3 (as amended by section 2 of chapter 15, session of 1897). Every person who shall, at any factory in the State, manufacture cheese shall stamp in a distinct and durable manner on each and every cheese manufactured by him, whether Cheddar, twin, flat, or Young America, or by whatever name or style known, before the sale thereof, in full-face capital letters not less than one inch high, in ordinary stamping ink, either red, black, green, purple, or violet in color, and of such composition as not to be easily removed or wholly obliterated by moisture.

Grades defined. the grade of the same, in the following-named letters and words: "Washington full cream," "Skimmed," or "Half-skimmed," as the case may be, together with the name of the factory and the name of the city, town, or village where the said factory is located; and such cheese only as shall contain thirty per centum of pure butter fat, and have been manufactured from pure and wholesome milk from which no portion of the butter fat shall have been removed by skimming, or by other process, and in the manufacture of which neither butter, nor any substance for butter, or other animal or vegetable fats or oils have been used, or any fat which has been extracted from milk in any form and returned for the purpose of filling said cheese, shall be stamped "Washington full cream," and such cheese only as shall be made from pure milk having not more than one-half of the cream thereof extracted, leaving in said cheese not less than fifteen per centum of pure butter fat, shall be marked "Half-skimmed," and such cheese only as shall be made from pure skimmed milk shall be marked "Skimmed;" and it shall be the duty of every person who shall sell or offer for sale in this State any cheese not made in this State to stamp said cheese in a manner similar to that required in the case of cheese made in this State, with the following letters and words: "Full cream," "Skimmed," or "Half-skimmed," as the case may be: *Provided*, That cheese not made in this State, but which shall be sold or offered for sale in this State, be not already so stamped as to indicate its true character: *Provided further*, That no cheese shall be stamped "Full cream" which does not in every particular comply with the requirements of "Washington full cream" cheese, as hereinbefore set forth, except as to place of manufacture: *And provided further*, That nothing in this section shall be construed to apply to Edam, Brick-stein, Pine Apple, Limburger, Swiss, or handmade cheese, or other Fancy cheese, by whatever name or style known, not made by ordinary Cheddar process.

Accounts of factories and private dairies. SEC. 4. Every butter or cheese manufacturer who shall at any creamery, cheese factory, or private dairy manufacture any butter or cheese shall keep or cause to be kept a correct account (open to the inspection of the dairy commissioner or any person furnishing milk to such creamery, cheese factory, or private dairy) of the number of pounds of milk daily received and of the number of pounds of butter and the number and aggregate weight of cheese made each day, and such manufacturer shall, on the first Monday in the month of December of each year, send a verified report of the same in writing or in print to the State board of dairy commissioners, and for the purpose of this act any butter or cheese manufacturer who shall keep twenty or more milk cows, and who shall manufacture the milk from the same into butter or cheese, shall be deemed and adjudged to be keeping a private dairy.

Imitation butter prohibited. SEC. 5. No person, by himself, his agents, or his servants, shall render or manufacture, sell, offer for sale, expose for sale, or have in his possession with intent to sell or serve to patrons, guests, boarders, or inmates of any hotel, eating house, restaurant, public conveyance, or boarding house, or public or private hospital, asylum, school, or eleemosynary

or penal institution, any article, product, or compound made wholly or partly out of any fat, oil, or oleaginous [substance] or compound thereof, not produced directly and wholly at the time of manufacture from unadulterated milk or the cream from the same, with or without harmless coloring matter, which shall be in imitation of yellow butter produced from pure, unadulterated milk or the cream from the same: *Provided*, That nothing in this act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form, and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to resemble butter.

Imitation cheese prohibited. SEC. 6. It shall be unlawful for any person to sell, or offer for sale or exchange, or have in his possession for sale, any cheese containing any substance except salt, rennet, and harmless coloring matter, other than that produced from pure milk or cream, or both, or from pure skimmed or pure half-skimmed milk.

Dairy commissioner. SEC. 7. There shall be appointed by the governor, by and with the advice and consent of the senate, one competent person who shall be denominated the dairy commissioner, whose term of office shall continue four years from and after the first Monday in April after his appointment, subject to removal for cause by the governor, or until his successor be appointed and qualified.

Bond required. SEC. 8. Before entering upon his duties, said dairy commissioner shall file with the secretary of state a good and sufficient bond in the sum of five thousand dollars, conditional upon the faithful discharge of his duties under this act.

Deputies, when appointed. SEC. 9. Said commissioner may appoint one or more deputies whenever he is unable to perform all the duties of his office without assistance; they shall hold office at the pleasure of the dairy commissioner, who may summarily remove any such deputy from office whenever in his judgment the public service calls for such removal.

Duties of commissioner. SEC. 10. It shall be the duty of the dairy commissioner to devote his entire time and attention to the dairy interests of the State of Washington, enforce all laws that now exist or that may be hereafter enacted in this State regarding the production, manufacture, or sale of dairy produce, and personally to inspect any articles of milk, butter, cheese, or imitations thereof made or offered for sale within the State which he may suspect or have reason to believe to be impure, unhealthful, adulterated, or counterfeit; and to prosecute, or cause to be prosecuted, any person or persons, firm or firms, corporation or corporations engaged in the manufacture or sale of any adulterated or counterfeit dairy products contrary to law.

Duty of chemists of State institutions. SEC. 11. It shall be the duty of the chemist of any State institution to correctly analyze, without extra compensation, and without other charge to the State than necessary traveling expenses, any and all substances that the dairy commissioner may send to either of them, and to report to him without unnecessary delay the result of any analysis so made; when called upon by said dairy commissioner any such chemist shall assist him in prosecuting violators of the law by giving testimony, either expert or otherwise.

Authority to employ chemists. SEC. 12. Whenever it is impossible or impracticable for the dairy commissioner to have necessary analysis performed by any of the said chemists mentioned in the preceding section, he shall have the power to appoint any competent chemist to make such analysis, who shall be paid a fair and reasonable compensation.

Powers of commissioner. SEC. 13. The dairy commissioner shall have power, in the performance of his official duties, to enter into any creamery, cheese, or condensed milk factory, store, salesroom, warehouse, or any place or building where he has reason to believe that any dairy products or imitations of dairy products are kept, made, prepared, sold, or offered for sale or exchange, and to open any cask, tub, package, or receptacle of any kind containing or supposed to contain any such article, and to examine or cause to be examined and analyzed the contents thereof; he may seize or take any such article for analysis: *Provided*, That if the person from whom such sample is taken shall request him to do so, he shall at the same time and in the presence of the person from whom such property was taken seal up two samples of the article seized or taken, one of which shall be for examination or analysis under the direction of

said commissioner, and the other of which shall be delivered to the person from whom the article was taken.

Penalty. SEC. 14. Any person who shall violate any of the provisions of this law, or who shall obstruct the dairy commissioner in the performance of his duties under this act by refusing him entrance to any place as enumerated in the preceding section, or by refusing to deliver to him samples of dairy products or imitations thereof upon demand and upon tender of the value thereof, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by fine of not less than twenty-five dollars nor more than one hundred dollars, or by imprisonment for not less than one month nor more than six months, or by both such fine and imprisonment.

Jurisdiction. SEC. 15. Any superior court, municipal court, or justice of the peace in this State shall have jurisdiction over all prosecutions arising under this act.

Salary. SEC. 16. The dairy commissioner shall receive an annual salary of twelve hundred dollars and shall be allowed his actual transportation expenses: *Provided*, That such expenses shall not exceed one thousand dollars in any one year. His deputies shall receive three dollars per day for each day actually employed, and actual expenses disbursed in the discharge of their duties shall be repaid to them. No deputy shall be employed at the cost of the State for more than thirty days in any one year.

Legal assistance. SEC. 17. It shall be the duty of the attorney-general or the prosecuting attorney in any county of the State, when called upon by the dairy commissioner, to render any legal assistance in their power to execute the laws and to prosecute cases arising under the provisions of this act.

Board of dairy commissioners ex officio. SEC. 18. The secretary of state, the president of the Agricultural College, and the dairy commissioner are hereby created a State board of dairy commissioners *ex officio*.

Travelling expenses. SEC. 19. The State board of dairy commissioners shall receive no compensation for their services as such board, but shall be allowed necessary actual traveling expenses. All accounts for expenditure incurred or made pursuant to the provisions of this act shall be approved and certified by said board of dairy commissioners before presentation to the State auditor.

Biennial reports. SEC. 20. The State board of dairy commissioners shall biennially, on December first, report to the governor of the State a full account of their actions under this act; also the operations and results of this and any other laws pertaining to the dairy industry of the State; a full account of all expenses and disbursements of the board and dairy commissioners; as full and complete statistics as it is in their power to collect pertaining to the manufacture, imports, and exports of dairy products within the State for the biennial term; and shall make suggestions as to the need of further legislation on the subject.

Expenses. SEC. 21. All expenses incurred under the provisions of this act shall be audited by the State auditor upon bills being presented properly certified by the board of dairy commissioners, and the said auditor shall, from time to time, draw warrants upon the State treasurer for the amounts thus audited.

Appropriation. SEC. 22. To carry out the provisions of this act there is hereby appropriated out of the general fund of the State for the term beginning April 1, 1895, and ending April 1, 1897, the sum of six thousand dollars.

Fines, disposition. SEC. 23. One-half of the fines collected under the provisions of this act shall be paid to the person or persons furnishing information upon which conviction is procured, and the remainder to be paid forthwith into the treasury of the county in which the conviction is obtained.

Repealing clause. SEC. 24. All acts and parts of acts in conflict with the provisions of this act are hereby repealed.

In effect. SEC. 25. Whereas grievous injustice is being perpetrated daily upon both consumers and producers within the State from lack of adequate legislation protective of the dairy interests, an emergency is hereby declared to exist, and this act shall take effect and be in force from and after its passage and approval by the governor.

WEST VIRGINIA.

CODE OF 1891, Chapter 150.¹

Adulterated foods, penalty for handling. SECTION 20. If a person fraudulently adulterate, for the purpose of sale, anything intended for food or drink, or if he knowingly sell or barter anything intended for food or drink, which is not what it is represented to be, or what it is sold for, he shall be confined in jail not more than one year, and fined not exceeding five hundred dollars: and the adulterated or other articles shall be forfeited and destroyed.

Imitation butter or cheese to be plainly marked. 20a. 1. Any person who manufactures, sells, or offers for sale any substance purporting to be, or having the semblance of, butter or cheese, which substance is not made wholly from pure cream or pure milk, unless each package, roll, or parcel thereof, and each vessel containing one or more packages of the same, has been distinctly, legibly, and durably printed, stamped, or marked thereon the true and appropriate name of each substance, and also the fact that it is not wholly made from pure cream or pure milk, as the case may be; or any person who sells to a consumer any such substance not so marked or stamped, or without delivering to the consumer a written or printed statement that it is not wholly made of pure cream or pure milk, as the case may be, shall be fined not less than ten dollars nor more than one hundred dollars, and, at the discretion of the court, be confined in jail until the fine and costs are paid, not exceeding, however, three months. But nothing contained in this act shall be so construed as to prevent the use of skimmed milk, salt, rennet, or harmless coloring matter in the manufacture of butter and cheese.

ACTS OF 1891, Chapter 8.

AN ACT in relation to manufacture and sale of oleomargarine, artificial, or adulterated butter. (Approved February 16, 1891.)

Oleomargarine or artificial butter to be colored pink. SECTION 1. That from and after the passage of this act it shall be unlawful for any manufacturer or vender of oleomargarine, artificial, or adulterated butter to manufacture or offer for sale within the limits of this State any oleomargarine, artificial, or adulterated butter, whether the same be manufactured within or without the State, unless the same shall be colored pink.

Penalty. SEC. 2. Any person violating any provision of this act shall be guilty of a misdemeanor, and upon conviction thereof be fined not less than twenty nor more than one hundred dollars for each offense.

Enforcement of penalty. SEC. 3. Any penalty arising under this act may be enforced by any magistrate within the county in which the offense occurs.

WISCONSIN.²

Dairy and food commissioner. 1. (Section 1, chapter 452, Laws of 1889.) The office of dairy and food commissioner for the State of Wisconsin is hereby created. Such commissioner shall be appointed by the governor, by and with the advice and consent of the senate, and his term of office shall be for two years from the date of his appointment and until his successor is appointed and qualified: *Provided*, That the term of office of the commissioner first appointed under this act shall expire on the first Monday in February, 1891; and vacancies occurring in the office for any cause shall be filled by appointment for the balance of the unexpired term. The salary of the commissioner shall be twenty-five hundred dollars per annum and his necessary and actual expenses incurred in the discharge of his official duties.

¹ 20 = Code Virginia, p. 805, Acts, 1882, chapter 93. 20a, 1 = Acts, 1885, chapter 41.

² Arranged as in "Laws of Wisconsin relating to the office and duties of the dairy and food commissioner and the adulteration of butter, cheese, and other foods, drugs, medicines, and liquors," published in 1897 by the dairy and food commissioner.

Assistants. 2. (Section 2, chapter 452, Laws of 1899.) Such commissioner may, with the consent and advice of the governor, appoint two assistants, each of acknowledged standing, ability, and integrity, one of whom shall be an expert in the matter of dairy products and the other of whom shall be a practical analytical chemist. The salaries of such assistants shall not exceed eighteen hundred dollars each per annum and their necessary and actual expenses incurred in the discharge of their official duties.¹

Agent for making inspections. 3. (Chapter 228, laws of 1897.) The dairy and food commissioner, with the approval of the governor, shall have authority to appoint an agent for the inspection of milk dairies, factories, and creameries, and to assist in the work of the dairy and food commission at such times and for such periods of time as may be required in the enforcement of the dairy and food laws of the State. The compensation of such agent shall be three dollars per day for each day of actual service and his expenses, to be paid by the State.

Commissioner's duties. 4. (Section 3, chapter 452, laws of 1899.) It shall be the duty of the commissioner to enforce all laws that now exist, or that may hereafter be enacted in this State, regarding the production, manufacture, or sale of dairy products, or the adulteration of any article of food or drink or of any drug, and personally or by his assistants to inspect any article of milk, butter, cheese, lard, syrup, coffee, or tea, or other article of food or drink or drug made or offered for sale within this State which he may suspect or have reason to believe to be impure, unhealthful, adulterated, or counterfeit, and to prosecute, or cause to be prosecuted, any person or persons, firm or firms, corporation or corporations engaged in the manufacture or sale of any adulterated or counterfeit article or articles of food or drink or drug contrary to the laws of this State.

Powers of commissioner. 5. (Section 4, chapter 452, laws of 1899.) Said commissioner or any assistant shall have power in the performance of his official duties to enter into any creamery, factory, store, sales room, or other place or building where he has reason to believe that any food or drink or drug is made, prepared, sold, or offered for sale, and to open any cask, tub, package, or receptacle of any kind containing, or supposed to contain, any such article, and to examine or cause to be examined and analyzed the contents thereof, and the commissioner or any of his assistants may seize or take any article of food or drink or drug for analysis; but if the person from whom such sample is taken shall request him to do so, he shall at the same time, and in the presence of the person from whom such property is taken, securely seal up two samples of the article seized or taken, the one of which shall be for examination or analysis under the direction of the commissioner, and the other of which shall be delivered to the person from whom the articles were taken. And any person who shall obstruct the commissioner or any of his assistants by refusing to allow him entrance to any place which he desires to enter in the discharge of his official duty, or refuses to deliver to him a sample of any article of food or drink or drug made, sold, offered or exposed for sale by such person, when the same is requested and when the value thereof is tendered, shall be deemed guilty of a misdemeanor, punishable by a fine of not exceeding twenty-five dollars for the first offense and not exceeding five hundred dollars or less than fifty dollars for each subsequent offense.

Samples for analysis. or any of his assistants may seize or take any article of food or drink or drug for analysis; but if the person from whom such sample is taken shall request him to do so, he shall at the same time, and in the presence of the person from whom such property is taken, securely seal up two samples of the article seized or taken, the one of which shall be for examination or analysis under the direction of the commissioner, and the other of which shall be delivered to the person from whom the articles were taken. And any person who shall obstruct the commissioner or any of his assistants by refusing to allow him entrance to any place which he desires to enter in the discharge of his official duty, or refuses to deliver to him a sample of any article of food or drink or drug made, sold, offered or exposed for sale by such person, when the same is requested and when the value thereof is tendered, shall be deemed guilty of a misdemeanor, punishable by a fine of not exceeding twenty-five dollars for the first offense and not exceeding five hundred dollars or less than fifty dollars for each subsequent offense.

Legal assistance. 6. (Section 5, chapter 452, laws of 1899.) It shall be the duty of the district attorney in any county of the State, when called upon by the commissioner or any of his assistants, to render any legal assistance in his power to execute the laws and to prosecute cases arising under the provisions of this act; and all fines and assessments collected in any prosecution begun or caused to be begun by said commissioner or his assistants shall be paid into the State treasury.

Analysis of various articles. 7. (Section 6, chapter 452, laws of 1899.) With the consent of the governor, the State board of health may submit to the commissioner or to any of his assistants samples of water or of food or drink or drugs for examination or analysis and receive special reports showing the result of such examination or analysis. And the governor may also authorize the commissioner or his assistants, when not otherwise employed in the duties of their offices, to render such assistance in the farmers' institutes, dairy and farmers' conventions, and the agricultural department of the university as shall by the authorities be deemed advisable.

¹ Chapter 355 of the laws of 1897 fixes the salary of the assistant commissioner at \$1,600, of the chemist at \$1,800, and of the commissioner's stenographer and confidential clerk at \$900.

Salaries paid from State treasury. 8. (Section 7, chapter 452, laws of 1889.) The salaries of the commissioner and his assistants shall be paid out of the State treasury in the same manner as the salaries of other officers are paid, and their official expenses shall be paid at the end of each calendar month upon bills duly itemized and approved by the governor, and the amount necessary to pay such salaries and expenses is hereby appropriated annually.

Appropriation for laboratory and apparatus. 9. (Section 8, chapter 452, laws of 1889.) The commissioner may, under the direction of the governor, fit up a laboratory, with sufficient apparatus for making the analysis contemplated in this act, and for such purpose the sum of fifteen hundred dollars, or so much thereof as may be necessary, is hereby appropriated, and for the purpose of providing materials and for other necessary expenses connected with the making of such analyses there is also hereby appropriated so much as may be necessary, not exceeding six hundred dollars annually. The appropriations provided for in this section shall be drawn from the State treasury upon the certificates of the governor.

Office and reports. 10. (Section 9, chapter 452, laws of 1889, as amended by chapter 109, laws of 1893.) Said commissioner shall be furnished a suitable office in the capitol at Madison, and shall make a biennial report to the governor, which shall contain an itemized account of all expenses incurred and fines collected, with such statistics and other information as he may regard of value; and, with the consent of the governor, not exceeding twenty thousand copies thereof, limited to three hundred pages, may be published biennially, as other official reports are published, and of which five thousand copies shall be bound in cloth.

Sale of adulterated, etc., milk; penalty. 11. (Section 1, chapter 425, laws of 1889, as amended by chapter 106, laws of 1897.) Any person who shall sell or offer for sale, or furnish or deliver, or have in possession, with intent to sell, or offer for sale, or furnish or deliver to any creamery, cheese factory, corporation, person, or persons whatsoever, as pure, wholesome, and unskimmed, any unmerchable, adulterated, impure, or unwholesome milk shall, upon conviction thereof, be punished by a fine of not less than twenty-five nor more than one hundred dollars for each and every offense.

Milk standard. 12. (Section 2, chapter 425, laws of 1889.) In all prosecutions or other proceedings under this or any other law of this State relating to the sale or furnishing of milk, if it shall be proven that the milk sold or offered for sale, or furnished or delivered, or had in possession with intent to sell or offer for sale, or to furnish or deliver as aforesaid, as pure, wholesome, and unskimmed, contains less than three per centum of pure butter fat, when subjected to chemical analysis or other satisfactory test, or that it has been diluted or any part of its cream abstracted, or that it or any part of it was drawn from cows known to the person complained of to have been within fifteen days before or four days after parturition, or to have any disease or ulcers or other running sores, then and in either case the said milk shall be held, deemed, and adjudged to have been unmerchable and adulterated, impure, or unwholesome, as the case may be.

Proof of adulteration. 13. (Section 2, chapter 157, laws of 1887, as amended by chapter 344, laws of 1889.) Proof of adulterations and skimming may be made with such standard tests and lactometers as are used to determine the quality of milk, or by chemical analysis.

Antiseptics in milk or cream. 14. (Chapter 168, laws of 1895.) Any person who shall sell or offer for sale, or consign, or have in his possession with intent to sell to any person or persons, any milk, cream, butter, cheese, or other dairy products, or who shall deliver to any creamery or cheese factory milk or cream to be manufactured into butter or cheese to which boric acid, salicylic acid, or compounds containing them, or other antiseptics injurious to health, have been added shall be deemed guilty of a misdemeanor, and upon conviction thereof be punished by a fine of not less than twenty-five nor more than one hundred dollars for each and every offense.

Filled cheese prohibited. 15. (Section 1, chapter 50, laws of 1895.) No person, by himself or by his agents or servants, shall manufacture, or shall buy, sell, offer, ship, consign, expose, or have in his possession for sale any cheese manufactured from or by the use of skimmed milk to which there has been added any fat which is foreign to such milk.

Size of skim-milk cheese. 16. (Section 2, chapter 30, laws of 1895.) No person, by himself or by his agents or servants, shall manufacture, or shall buy, sell, offer, ship, consign, expose, or have in his possession for sale, within this State, any skimmed-milk cheese or cheese manufactured from milk from which any of the fat originally contained therein has been removed, except such cheese is ten inches in diameter and nine inches in height.

Imitation butter prohibited. 17. (Section 3, chapter 30, laws of 1895.) No person, by himself or by his agents or servants, shall render or manufacture, sell, ship, consign, offer for sale, expose for sale, or have in his possession with intent to sell, any article, product, or compound made wholly or partly out of any fat, oil, or oleaginous substance or compound thereof, not produced from unadulterated milk or cream from the same, and without the admixture or addition of any fat foreign to said milk or cream, which shall be in imitation of yellow butter produced from pure unadulterated milk or cream of the same, with or without coloring matter: *Provided*, That nothing in this

Sale of oleomargarine restricted. act shall be construed to prohibit the manufacture or sale of oleomargarine in a separate and distinct form and in such manner as will advise the consumer of its real character, free from coloration or ingredient that causes it to look like butter.

Sale of oleomargarine as butter. 18. (Section 4, chapter 30, laws of 1895.) It shall be unlawful for any person to sell or offer for sale to any person who asks, sends, or inquires for butter any oleomargarine, butterine, or any substance made in imitation or semblance of pure butter not made entirely from the milk of cows, with or without coloring matter.

Marking of oleomargarine. 19. (Section 5, chapter 30, laws of 1895.) It shall be unlawful for any person to expose for sale oleomargarine, butterine, or any similar substance not marked and distinguished on the outside of each tub, package, or parcel thereof by a placard with the word "Oleomargarine," and not having also upon every open tub, package, or parcel thereof a placard with the word "Oleomargarine," such placard in each case to be printed in plain, uncondensed Gothic letters not less than one inch long, and such placard shall not contain any other words thereon.

Signs where sold. 20. (Section 6, chapter 30, laws of 1895.) It shall be the duty of every person who sells oleomargarine, butterine, or any similar substance from any dwelling, store, office, or public mart to have conspicuously posted thereon the placard or sign, in letters not less than four inches in length, "Oleomargarine sold here," or "Butterine sold here." Such placard shall be approved by the dairy and food commissioner of the State of Wisconsin.

Vehicles to bear placards. 21. (Section 7, chapter 30, laws of 1895.) It shall be unlawful for any person to peddle, sell, or deliver from any cart, wagon, or other vehicle, upon the public streets or ways, oleomargarine, butterine, or any similar substance, not having on the outside of both sides of said cart, wagon, or other vehicle the placard in uncondensed Gothic letters, not less than three inches in length, "Licensed to sell oleomargarine."

Guests to be notified. 22. (Section 8, chapter 30, laws of 1895.) It shall be unlawful for any person to furnish, or cause to be furnished, in any hotel, boarding house, restaurant, or at any lunch counter, oleomargarine, butterine, or any similar substance to any guest or patron of said hotel, boarding house, restaurant, or lunch counter, without first notifying such guest or patron that the substance so furnished is not butter.

Penalties. 23. (Section 9, chapter 30, laws of 1895.) Any person who shall violate any of the provisions of this act shall be guilty of a misdemeanor, and upon conviction thereof shall be punished for the first offense by a fine of not less than fifty dollars nor more than five hundred dollars; and upon conviction of any subsequent offense shall be punished by a fine of not less than one hundred dollars or more than five hundred dollars, or by imprisonment in the county jail of not less than ten days nor more than sixty days, or by both such fine and imprisonment, at the discretion of the court.

Legal assistance. 24. (Section 10, chapter 30, laws of 1895.) It shall be the duty of the district attorney in any county of the State, when called upon by the dairy and food commissioner of this State, or any of his assistants, to render any legal assistance in his power to execute, and to prosecute the cases arising under the provisions of this act; and the dairy and food commissioner shall have power to appoint, with the approval of the governor, special counsel to prosecute or to assist in the prosecution of any case arising under the provisions of this act.

- Pure butter and cheese in charitable and penal institutions.** 25. (Section 7, chapter 165, laws of 1891.) No butter or cheese not made wholly and directly from pure milk or cream, salt, and harmless coloring matter shall be used in any of the charitable or penal institutions of the State.
- Penalty.** 26. (Section 8, chapter 165, laws of 1891.) Any person or persons violating any of the provisions or sections of this act shall, upon conviction thereof, be fined not less than twenty-five nor more than fifty dollars for the first offense, or for each subsequent offense not less than fifty nor more than one hundred dollars, or be imprisoned in the county jail not less than ten nor more than ninety days, or both.
- False brands.** 27. (Section 1, chapter 228, laws of 1893.) No person shall offer for sale, sell, ship, or consign cheese labeled with a false brand or label as to the quality of the article.
- Uniform brands.** 28. (Section 2, chapter 228, laws of 1893.) The State dairy and food commissioner is hereby authorized and directed to issue to the cheese manufactories of the State, upon proper application therefor and under such regulations as to the custody and use thereof as he may prescribe, a uniform stencil or brand, bearing a suitable device or motto and the words "Wisconsin full cream cheese."
- Brand, how used, and registration.** 29. (Section 3, chapter 228, laws of 1893.) Every brand issued shall be used upon the side of the cheese on the bandage thereof, also upon the package containing the same, and shall bear a different number for each separate manufactory, and the commissioner shall keep a book in which shall be registered the name, location, and number of each manufactory using the said brand, and the name or names of the persons at each manufactory authorized to use the same.
- Full cream cheese only to be branded.** 30. (Section 4, chapter 228, laws of 1893.) It shall be unlawful to use or permit such brand to be used upon any other than full cream cheese or package containing the same.
- Skimmed-cheese brand.** 31. (Section 5, chapter 228, laws of 1893.) Every person who shall, at any cheese factory in the State, manufacture skimmed cheese, shall distinctly and durably stamp upon each and every such cheese, and upon the box, the words "Wisconsin skimmed cheese." All cheese not manufactured as in sections 1, 2, 3, and 4 of this act shall be deemed to be skimmed cheese under the provisions of this act. The brand herein provided by this section of this act for designating the grade and quality of cheese provided by this section shall be such as to produce an impression not less than three inches in width and five inches in length, and shall be in full-faced capital letters of as large size as the space hereby provided for will permit, and the whole to be included within a plain, heavy border. Ordinary stamping ink, either red, green, or violet in color, and of such composition as not to be easily removed or wholly obliterated by moisture, shall be used in stamping as provided for by this section.
- Stamping ink.** 32. (Section 6, chapter 228, laws of 1893, as amended by chapter 189, 1897.) **Penalty.** Whoever violates the provisions of this act shall be deemed guilty of a misdemeanor, and for each and every package so falsely branded or omitted to be branded as herein provided shall be punished by a fine of not less than twenty-five nor more than fifty dollars.
- Powers of dairy commissioner.** 33. (Section 1, chapter 257, laws of 1895.) The dairy and food commissioner or his agents shall have full access and ingress to any factory or building where any product of the dairy is manufactured or stored for sale or shipment of the same, and shall be empowered to enforce such measures as may be necessary for the perfect cleanliness of said factories, buildings, and surroundings; also for the cleanliness of all the utensils necessarily used in the manufacture and general handling of the dairy product. Any person refusing the privilege of such access to the dairy and food commissioner or his agent or opposing him in any way, shall be considered as having committed a misdemeanor.
- Warrant for seizure.** 34. (Section 2, chapter 257, laws of 1895.) When complaint shall be made on oath to any magistrate authorized to issue warrants in criminal cases that imitation butter or imitation cheese or any substance designed or intended to be used as a substitute for butter or cheese is in the possession or under the control of any person or persons contrary to the provisions of law of this State, and that the complainant believes that it is concealed in any

particular warehouse, store, or refrigerator for mercantile purposes, the magistrate, if he be satisfied that there be cause for such belief, shall issue a warrant for such property.

Terms of warrant. 35. (Section 3, chapter 257, laws of 1895.) All such warrants shall be directed to the sheriff of the county or his deputy or to any constable of the county, commanding such officer to search the house, building, store, or other place where the imitation butter or imitation cheese or any substance designed or intended to be used as imitation butter or cheese, for which he is required to search is believed to be concealed, which place and property to be searched for shall be designated and described in the warrant, and to bring such property when found and the person or persons in whose possession the same shall be found before the magistrate who issued the warrant or before some other magistrate or court having cognizance of the case.

Preservation, analysis, and confiscation. 36. (Section 4, chapter 257, laws of 1895.) When any officer in the execution of a search warrant under the provisions of this act shall find any imitation butter or cheese, or any substance designed or intended to be used as an imitation for butter or cheese, and for which a search is allowed by this act, all the property so seized shall be safely kept by the direction of the court or magistrate so long as shall be necessary for the purpose of being produced as evidence on any trial: *Provided*, That it shall be the duty of the officer who serves a search warrant issued for imitation butter or imitation cheese or any substance designed or intended to be used as imitation for butter or cheese and alleged to be in his possession or under the control of any person or persons contrary to law, to deliver to the State dairy and food commissioner, or to any person by such commissioner authorized in writing to receive the same, a true and perfect sample of each article seized by virtue of such warrant for the purpose of having the same analyzed. If any sample be found to be imitation butter or imitation cheese or substance designed or intended to be used as an imitation for butter or cheese and that the same, at the time of such seizure, was in the possession or under the control of any person or persons contrary to any of the provisions or requirements of this act, then and in such case the property so seized shall be confiscated and destroyed, under the direction of the court or magistrate; otherwise the same shall be forthwith returned to the person or persons from whom it was taken.

Penalty. 37. (Section 5, chapter 257, laws of 1895.) Any person or persons violating any of the provisions or sections of this act shall be guilty of a misdemeanor and upon conviction thereof be fined not less than twenty-five nor more than fifty dollars for the first offense, and for each subsequent offense not less than fifty nor more than one hundred dollars, or be imprisoned in the county jail not less than thirty nor more than ninety days, in the discretion of the court before whom such conviction may be had.

Preventing sale of unwholesome milk. 38. (Section 1, chapter 94, laws of 1897.) The dairy and food commissioner or his agents shall have full access and ingress to all premises, buildings, or dairies where milk is stored, produced, or handled for the city milk trade, and is hereby empowered to enforce such measures as may be necessary to prevent the sale of milk from diseased cows or from cows fed upon unwholesome food, and to require cleanliness in all barns, stables, milk houses, or buildings where milk is produced or stored for the city milk trade.

Care and food of cows. 39. (Section 2, chapter 94, laws of 1897.) Any person or persons owning or managing a dairy, the product of which is sold as milk for family use, shall feed his cows upon wholesome food, keep them, when housed, in clean and comfortable stables, and handle the milk with clean utensils.

Penalty. 40. (Section 3, chapter 94, laws of 1897.) Any person or persons violating any of the provisions of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof, be fined not less than twenty-five nor more than one hundred dollars for the first offense, and not less than one hundred nor more than two hundred for each subsequent offense.

Using patrons' milk. 41. (Section 1494a, Revised Statutes.) Any butter or cheese manufacturer who shall knowingly use, or allow any of his employees or any other person to use for his or their own individual benefit, any milk, or cream from the milk, brought to said butter or cheese manufacturer, without the consent of all the owners thereof, or any butter or cheese manufacturer who shall refuse or neglect to keep, or cause to be kept, a correct account (open to the inspection of any one furnishing milk to such manufacturer) of the amount of milk daily received,

or of the number of pounds of butter, and the number and aggregate weight of cheese made each day, or of the number cut or otherwise disposed of, and the weight of each, shall for each and every offense forfeit **Penalty; disposition of fines.** and pay a sum not less than twenty-five dollars nor more than one hundred dollars, to be recovered in an action in any court of competent jurisdiction, one-half for the benefit of the person or persons, firm or association, or their assigns, upon whom such fraud or neglect shall be committed, first having made complaint therefor, the remainder to the school fund.

Adulterated foods prohibited. 42. (Section 1, chapter 166, laws of 1897.) No person, by himself, his servant, or agent, or as the servant or agent of any other person, shall sell, exchange, deliver, or have in his possession with the intent to sell or exchange, or expose or offer for sale or exchange any drug or article of food which is adulterated within the meaning of this act.

Food defined. 43. (Section 2, chapter 166, laws of 1897.) * * * The term "food," as used herein, shall include all articles used for food or drink by man, whether simple, mixed, or compound.

44. (Section 3, chapter 166, laws of 1897.) An article shall be deemed to be adulterated within the meaning of this act:

(a) In the case of drugs: * * *

Adulterated food defined. (b) In the case of food: First, if any substance or substances have been mixed with it, so as to lower or depreciate or injuriously affect its strength, quality, or purity; second, if any inferior or cheaper substance or substances have been substituted wholly or in part for it; third, if any valuable or necessary ingredient has been wholly or in part abstracted from it; fourth, if it is an imitation of or sold under the name of another article; fifth, if it consists wholly or in part, of a diseased [diseased], infected, decomposed, putrid, tainted, or rotten animal or vegetable substance or article, whether manufactured or not; sixth, if it is colored, coated, polished, or powdered, whereby damage or inferiority is concealed, or if by any means it is made to appear better or of greater value than it really is; seventh, if it contains any added substance or ingredient which is poisonous, injurious, or deleterious to health, or any deleterious substance not a necessary ingredient in its manufacture: *Provided*, That the provisions of this act shall not apply to mixtures or compounds recognized as ordinary articles of food, if the same be distinctly labeled as mixtures or compounds, and from which no necessary ingredient in the preparation is eliminated.

* * * * *

Penalty. 48. (Section 7, chapter 166, laws of 1897.) Whoever violates any of the provisions of this act shall be guilty of a misdemeanor, and, upon conviction, shall be fined not exceeding one hundred nor less than twenty-five dollars for each and every offense.

Repealing clause. 49. (Section 8, chapter 166, laws of 1897.) Section 4, chapter 248 laws of 1879; sections 1, 2, 3, 4, 5, and 6, chapter 252, laws of 1880; section 5, chapter 40, laws of 1881: section 13, chapter 167, laws of 1882, as amended by section 11, chapter 227, laws of 1895, and all acts and parts of acts inconsistent with this act shall be, and the same are hereby, repealed.

In effect. 50. (Section 9, chapter 166, laws of 1897.) This act shall take effect and be in force from and after January 1, 1898.

CANADA.

[The Federal dairy laws of Canada are given herewith, being taken from the report of the commissioner of dairying, 1898.]

40 VICTORIA, Chapter 42.

AN ACT to prohibit the manufacture and sale of certain substitutes for butter. (Assented to 2d June, 1896.)

Preamble. Whereas the use of certain substitutes for butter, heretofore manufactured and exposed for sale in Canada, is injurious to health, and it is expedient to prohibit the manufacture and sale thereof: Therefore Her Majesty, by

and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:

Manufacture and sale of certain substitutes for butter prohibited. 1. No oleomargarine, butterine, or other substitute for butter manufactured from any animal substance other than milk shall be manufactured in Canada or sold therein, and every person who contravenes the provisions of this act in any manner whatsoever shall incur a penalty not exceeding four hundred dollars and not less than two hundred dollars, and in default of payment shall be liable to imprisonment for a term not exceeding twelve months and not less than three months.

52 VICTORIA, Chapter 43.

AN ACT to provide against frauds in the supplying of milk to cheese, butter and condensed-milk manufactories. (Assented to 2d May, 1889.)

Milk supplied to factories to be unadulterated. 1. No person shall sell, supply, or send to any cheese or butter or condensed-milk manufactory, or to the owner or manager thereof, or to any maker of butter, cheese or condensed milk, to be manufactured, milk diluted with water, or in any way adulterated, or milk from which any cream has been taken, or milk commonly known as skim milk.

A certain part of the milk not to be kept back. 2. No person who supplies, sends, sells, or brings to any cheese or butter or condensed-milk manufactory, or to the owner or manager thereof, or to the maker of cheese or butter or condensed milk, any milk to be manufactured into butter or cheese or condensed milk, shall keep back any portion of that part of the milk known as strippings.

As to tainted or sour milk. 3. No person shall knowingly sell, supply, bring, or send to a cheese or butter or condensed-milk manufactory, or to the owner or manager thereof, any milk that is tainted or partly sour.

As to diseased animal. 4. No person shall sell, send, or bring to a cheese or butter or condensed-milk manufactory, or to the owner or manager thereof, or to the maker of such butter or cheese or condensed milk, any milk taken or drawn from a cow that he knows to be diseased at the time the milk is so taken or drawn from her.

Penalty for contravention. 5. Every person who, by himself or by any other person to his knowledge, violates any of the provisions of the preceding sections of this act, shall, for each offence, upon conviction thereof before any justice or justices of the peace, forfeit and pay a fine not exceeding fifty dollars and not less than five dollars, together with the costs of prosecution, and in default of payment of such penalty and costs shall be liable to imprisonment with or without hard labour for a term not exceeding six months, unless the said penalty and the costs of enforcing the same be sooner paid.

Who shall be liable. 6. The person on whose behalf any milk is sold, sent, supplied, or brought to a cheese or butter or condensed-milk manufactory for any of the purposes aforesaid shall be prima facie liable for the violation of any of the provisions of this act.

What shall be evidence. 7. For the purpose of establishing the guilt of any person charged with the violation of any of the provisions of sections one or two of this act, it shall be sufficient prima facie evidence on which to found a conviction to show that such milk so sent, sold, supplied, or brought to a manufactory as aforesaid to be manufactured into butter or cheese or condensed milk is substantially inferior in quality to pure milk, provided the test is made by means of a lactometer or cream gauge or some other proper and adequate test and is made by a competent person: *Provided always*, That a conviction may be made or had on any other sufficient legal evidence.

Specific nature of deterioration need not be described. 8. In any complaint or information made or laid under the first or second sections of this act, and in any conviction thereon, the milk complained of may be described as deteriorated milk, without specification of the cause of deterioration, and thereupon proof of any of the causes or modes of deterioration mentioned in either of the said two sections shall be sufficient to sustain conviction. And in any complaint, information, or conviction under this act the matter complained of may be declared and shall be held to have arisen,

within the meaning of "The Summary Convictions Act," at the place where the milk complained of was to be manufactured, notwithstanding that the deterioration thereof was effected elsewhere.

Appeal. 9. No appeal shall lie from any conviction under this act except to a judge of a superior, county, circuit, or district court, or to the chairman or judge of the court of the sessions of the peace having jurisdiction where the conviction was had; and such appeal shall be brought, notice of appeal in writing given, recognizance entered into, or deposit made within ten days after the date of conviction, and shall be heard, tried, adjudicated upon, and decided, without the intervention of a jury, at such time and place as the court or judge hearing the same appoints, within thirty days from the date of conviction, unless the said court or judge extends the time for hearing and decision beyond such thirty days; and in all other respects not provided for in this act the procedure under "The Summary Convictions Act," so far as applicable, shall apply.

Who to give evidence. 10. Any person accused of an offence under this act and the husband or wife of such person shall be competent and compellable to testify.

Application of fines. 11. Any pecuniary penalty imposed under this act shall, when recovered, be payable one half to the informant or complainant and the other half to the owner, treasurer, or president of the manufactory to which milk was sent, sold, or supplied for any of the purposes aforesaid in violation of any of the provisions of this act, to be distributed among the patrons thereof in proportion to their respective interests in the product thereof.

AN ACT to prevent the manufacture and sale of filled or imitation cheese, and to provide for the branding of dairy products.

Short title. 1. This act may be cited as "The Dairy Products Act," 1893.

Imitation cheese prohibited. 2. No person shall manufacture, or shall knowingly buy, sell, offer, expose, or have in his possession for sale, any cheese manufactured from or by the use of skimmed milk to which there has been added any fat which is foreign to such milk.

Penalty. (2) Every person who, by himself or by any other person to his knowledge, violates the provisions of this section, shall, for each offence, upon conviction thereof before any justice or justices of the peace, be liable to a fine not exceeding five hundred dollars and not less than twenty-five dollars, together with the costs of prosecution, and in default of payment of such fine and cost shall be liable to imprisonment, with or without hard labour, for a term not exceeding six months, unless such fine and the costs of enforcing it are sooner paid.

Skim-milk cheese to be marked. 3. No person shall sell, offer, expose, or have in his possession for sale, any cheese manufactured from or by the use of milk commonly known as "skimmed milk," or milk from which cream has been removed, or milk to which skimmed milk has been added, unless the words "skim-milk cheese" are branded, marked or stamped in a legible manner upon the side of every cheese, and also upon the outside of every box or package which contains the same, in letters not less than three quarters of an inch high and three quarters of an inch wide.

Mark not to be removed. (2) No person, with intent to misrepresent or to defraud, shall remove or in any way efface, obliterate, or alter the words "skim-milk cheese" on such cheese, or on any box or package which contains the same.

Penalty. (3) Every person who, by himself or by any other person to his knowledge, violates any of the provisions of this section shall, for each offence, upon conviction thereof before any justice or justices of the peace, be liable to a fine not exceeding five dollars and not less than two dollars for every such cheese or box or package which is sold, offered, exposed, or had in his possession for sale, together with the costs of prosecution, and in default of payment of such fine and costs shall be liable to imprisonment, with or without hard labour, for a term not exceeding three months, unless such fine and the costs of enforcing it are sooner paid.

"Canadian" as a brand. 4. No person shall apply any brand, stamp, or mark of the word "Canadian," "Canadien," or "Canada" as a descriptive term, mark, or brand upon any cheese or upon any box or package which contains cheese or butter, unless such cheese and butter have been produced in Canada.

Sale of cheese so branded falsely. (2) No person shall knowingly sell, offer, expose, or have in his possession for sale any cheese or butter upon which or upon any box or package which contains the same the word "Canadian," "Canadien," or "Canada" is applied as a descriptive term, mark, or brand, unless such cheese and butter have been produced in Canada.

Penalty. (3) Every person who, by himself or by any other person to his knowledge, violates any of the provisions of this section shall, for each offence, upon conviction thereof before any justice or justices of the peace, be liable to a fine not exceeding twenty dollars and not less than five dollars for every such cheese or box or package which is sold, offered, exposed, or had in his possession for sale, together with the costs of prosecution, and in default of payment of such fine and costs shall be liable to imprisonment, with or without hard labour, for a term not exceeding three months, unless such fine and the costs of enforcing it are sooner paid.

Name of country where produced to be marked. 5. No person shall sell, offer, expose, or have in his possession for sale, any cheese or butter which is produced in any foreign country, unless the name of the country where such cheese or butter was produced is branded, stamped, or marked in a legible manner upon the outside of every box or package which contains the same in letters not less than three-eighths of an inch high and one-quarter of an inch wide.

Penalty. (2) Every person who, by himself or by any other person to his knowledge, violates the provisions of the next preceding section of this act shall, for each offence, upon conviction thereof before any justice or justices of the peace, be liable to a fine not exceeding five dollars and not less than two dollars for every such cheese or box or package of butter which is sold, offered, exposed, or had in possession for sale, together with the costs of prosecution, and in default of payment of such and costs shall be liable to imprisonment, with or without hard labour, for a term not exceeding three months, unless such fine and the costs of enforcing it are sooner paid.

Who shall be liable. 6. The person on whose behalf any cheese or butter is manufactured, sold, offered, exposed, or had in possession for sale contrary to the provisions of the foregoing sections of this act, shall be *prima facie* liable for the violation of any of the provisions of this act.

Procedure. 7. In any complaint, information, or conviction under this act the matter complained of may be declared, and shall be held to have arisen, within the meaning of the summary convictions act, at the place where the cheese or butter complained of was manufactured, sold, offered, exposed, or had in possession for sale.

Appeal. 8. No appeal shall lie from any conviction under this act except to a superior, county, circuit, or district court, or the court of the sessions of the peace having jurisdiction where the conviction was had; and such appeal shall be brought, notice of appeal in writing given, recognizance entered into or deposit made within ten days after the date of conviction; and such appeal shall be heard, tried, adjudicated upon, and decided, without the intervention of a jury, at such time and place as the court or judge hearing the same appoints, within thirty days from the date of conviction, unless the said court or judge extends the time for hearing and decision beyond such thirty days; and in all other respects not provided for in this act the procedure under the summary convictions act, so far as applicable, shall apply.

Right to make examination of cheese or butter. 9. It shall be lawful for any person who may be charged with the enforcement of this act to enter upon the premises of any person suspected of violating the provision of this act and make an examination of cheese or butter; and any such suspected person who obstructs or refuses to permit the making of any such examination shall, upon conviction thereof, be liable to a penalty not exceeding five hundred dollars and not less than twenty-five dollars, together with the costs of prosecution; and in default of payment of such penalty and costs shall be liable to imprisonment, with or without hard labour, for a term not exceeding six months, unless the said penalty and the costs of enforcing the same are sooner paid.

Application of penalties. 10. Any pecuniary penalty imposed under this act shall, when recovered, be payable, one-half to the informant or complainant and the other half to Her Majesty.

Governor in council may make regulations.

11. The governor in council may make such regulation as he considers necessary in order

to secure the efficient operation of this act; and the regulations so made shall be in force from the date of their publication in the Canada Gazette, or from such other date as is specified in the proclamation in that behalf.

(O 61 VICTORIA, Chapter 21.)

AN ACT to provide for the registration of cheese factories and creameries, and the branding of dairy products, and to prohibit misrepresentation as to the dates of manufacture of such products. (Assented to 29th June, 1897.)

Short title. 1. This act may be cited as the dairy act, 1897.

Registration of cheese factories and creameries. 2. The minister of agriculture shall keep in the department of agriculture a book to be called "The Cheese Factories and Creameries Register," and any person engaged in the business of cheese or of butter making may apply to the department of agriculture, at Ottawa, for the registration of the cheese factory or creamery owned or duly represented by him; and on receipt of the particulars, as set forth in Schedule A of this act, the minister of agriculture, or such officer of the department of agriculture as is designated by the governor in council, shall forthwith send to the owner or representative of such cheese factory or creamery a certificate showing the registration number allotted to such cheese factory or creamery.

Exclusive right to use registration number. 3. The person to whom such registration number is assigned shall thereafter have the exclusive right to use it for the purpose of designating the dairy products manufactured by him at such cheese factory or creamery, in the manner shown in Schedule B to this act.

Branding of word "Canadian," "Canadien," or "Canada" compulsory. 4. No person shall sell, offer, expose, or have in his possession for sale any butter or cheese made in Canada and destined for export therefrom unless the word "Canadian," "Canadien," or "Canada" is printed, stamped, or marked in a legible and indelible manner in letters not less than three-eighths of an inch high and one-quarter of an inch wide upon—

(a) The box or package containing the butter or cheese; and

(b) Moreover, in the case of cheese, upon the cheese itself before it is taken from the factory where it was made.

Defacing marks prohibited. 5. No person, with intent to misrepresent, shall remove or in any way efface, obliterate, or alter the word "Canadian," "Canadien," or "Canada," or the registration number on any cheese, or on any box or package which contains cheese or butter.

Misrepresentation as to dates of manufacture prohibited. 6. No person shall knowingly sell, or offer, expose, or have in his possession for sale, any cheese or butter upon which, or upon any box or package containing which, is printed, stamped, or marked, any month other than the month in which such butter or cheese was made; and no person shall, knowingly and with intent to misrepresent, sell, or offer, expose, or have in his possession for sale, any cheese or butter represented in any manner as having been made in any month other than the month in which it was actually made.

Penalties. 7. Every person who, by himself or any other person, to his knowledge, violates any of the provisions of sections four, five, and six of this act shall, for each offense, upon summary conviction, be liable to a fine not exceeding twenty dollars and not less than five dollars for every cheese or box or package of butter or cheese which is sold or offered, exposed, or had in his possession for sale contrary to the provisions of those sections, together with the costs of prosecution, and, in default of payment of such fine and costs, shall be liable to imprisonment with or without hard labor, for a term not exceeding three months, unless such fine and the costs of enforcing it are sooner paid.

Application of penalties. 8. Any pecuniary penalty imposed under this act shall, when recovered, be payable one-half to the informant or complainant and the other half to Her Majesty.

Governor in council may make regulations. 9. The governor in council may make such regulations as he considers necessary in order to secure the efficient operation of this act; and the regulations so made shall be in force from the date of their publication in the Canada Gazette, or from such other date as is specified in the proclamation in that behalf.

SCHEDULE A.

Particulars for the registration of cheese factories and creameries:

1. Name of cheese factory or creamery.....
2. Where situated.....
 - (a) Province.....
 - (b) County.....
 - (c) Township or parish.....
 - (d) Post-office.....
 - (e) Telegraph or telephone office.....
 - (f) Railway station or shipping port.....
3. Name of owner.....
Post-office address.....
- If a cooperative dairy association or joint stock company—
Name of secretary.....
Post-office address.....
4. Registered brand or trade-mark, if any.....
5. Registered number allotted.....

The above is certified correct.

.....	Owner.
.....	P. O. address.
.....	Secretary.
Witness.....	
.....	P. O. address.
Witness.....	
.....	P. O. address.

SCHEDULE B.

Form of brand for registered number to be allotted to cheese factories and creameries:

REGISTERED

No.¹.....

DAIRY ACT, 1897.

¹ The figure or figures of registration to be inserted.

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